73-70920 TRENCHER TH300

PARTS MANUAI

MAN 4158498 Rev. A 3-2007



CALIFORNIA **Proposition 65 Warning**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Californie Proposition 65 Avertissement

Les échappements des moteurs diesel et certains de leurs composés sont reconnus par l'Etat de Californie pour être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

A AVERTISSEMENT

L'émission du moteur de ce matériel contient des produits chimiques que l'Etat de Californie considère être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

California Advertencia de la Proposicion 65

El estado de California hace saber que los gases de escape de los motores diesel y algunos de sus componentes producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.



ADVERTENCIA

El estado de California hace saber que los gases de escape de este producto contienen productos químicos que producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

CALIFORNIA Proposition 65 Warning

Battery posts, terminals, wiring insulation, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. WASH HANDS AFTER HANDLING.

IMPORTANT MESSAGE

Thank you for purchasing this Schiller Grounds Care, Inc. product. You have purchased a world class product, one of the best designed and built anywhere.

This product comes with an Owner/Operator's Manual. The useful life and good service you receive from this product depends to a large extent on how well you read and understand this manual. Treat this product properly and adjust it as instructed, and it will give you many years of reliable service.

See a Schiller Grounds Care, Inc. dealer for any service or parts needed. Schiller Grounds Care, Inc. service ensures that you continue to receive the best results possible from Schiller Grounds Care, Inc. products. You can trust Schiller Grounds Care, Inc. replacement parts because they are manufactured with the same high precision and quality as the original parts.

Schiller Grounds Care, Inc. designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this product only as directed in the manual, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Schiller Grounds Care, Inc. One Bob Cat Lane Johnson Creek, WI 53038-0469

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3-2007 **1**

DESCRIPTION

The trencher is designed to perform with the Steiner 4-wheel drive articulated frame steering tractors. The trencher mounts on the quick hitch front lift in the conventional manner. Driven by a PTO belt, a right angle gearbox provides a 2 to 1 reduction providing power to the trencher digging chain. The depth of trench is regulated by a cylinder controlled by the auxiliary hydraulic system of the power unit.

Features include:

- · Visible depth indicator.
- Front mount Quick Hitch.
- Variable depth control.
- High performance bearings throughout.
- Quick chain tension adjustment.
- Heat treated carbide tip chain.

Trencher easily follows line of trench, cutting to a maximum depth of 28 inches. The depth of cut is easily adjustable during operation indicated by the highly visible depth gauge.



SPECIFICATIONS

l	Overall Width	. 37"
	Overall Height	
	Overall Length	
	Total Weight	
ı	Auger Diameter	
l	Chain Speed	. 550 ft./min.
l	Drive Shaft (diameter)	. 1-1/2"
l	Cutting Depth (max)	. 28"
l	Cutting Width	. 4-3/4"
ı	<u> </u>	

NOTICE !!!

Unauthorized modifications may present **extreme** safety hazards to operators and bystanders and could also result in product damage.

Schiller Grounds Care, Inc. strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Schiller Grounds Care, Inc. Engineering Department. Any Schiller Grounds Care, Inc. product that is altered, modified or changed in any manner not specifically authorized after original manufacture—including the addition of "after-market" accessories or component parts not specifically approved by Schiller Grounds Care, Inc.—will result in the Schiller Grounds Care, Inc. Warranty being voided.

Any and all liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Schiller Grounds Care, Inc. will be considered the responsibility of the individual(s) or company designing and/or making such changes. Schiller Grounds Care, Inc. will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.



This symbol means:

ATTENTION! BECOME ALERT!

Your safety and the safety of others is involved.

Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Schiller Grounds Care, Inc. machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

A DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

AWARNING

WARNING indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

ACAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

CAUTION

SERIAL NUMBER

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **MAY** result in property damage

Schiller Grounds Care, Inc.

One Bobcat Lane

Johnson Creek, WI 53038 U.S.A

Phone: 920-699-2000 Fax: 920-699-3683

MODEL NUMBER

MODEL NUMBER: This number appears on sales literature, technical manuals and price lists.

SERIAL NUMBER: This number appears only on your mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

GENERAL SAFETY

- 1. Read and understand the Owner's Manual before attempting to operate this machine.
- 2. Operate all controls from the operator's seat. NO RIDERS.
- 3. Keep all shields in place and safety switches adjusted properly.
- 4. Do not leave equipment unattended. STOP the engine and remove the key.
- 5. Do not allow minors or the inexperienced to operate this machine.
- 6. Keep people and pets a safe distance away from machine using power driven attachments. Injury could result from flying debris.

OPERATING SAFETY

- 1. STOP ENGINE to install drive belt.
- DO NOT attempt to work on power unit or any attachments with the engine running. STOP ENGINE!
- 3. Before leaving the tractor seat:
 - Disengage PTO
 - Set PARKING brake.
 - · Stop engine.

A DANGER

DO NOT OPERATE WITH BYSTANDERS IN THE AREA.
UNEXPECTED TRENCH CAVE-IN OR ANY ACTION
CAUSING PERSONS TO CONTACT FAST MOVING DIGGING
CHAIN COULD CAUSE SERIOUS INJURY OR DEATH.

MOUNTING INSTRUCTIONS

The trencher should be used only on Steiner 4-wheel drive power units equipped with hydraulic auxiliary couplers.

To mount the trencher do the following steps:

- 1. Open quick hitch latches. Drive tractor into position, aligning the quick hitch. Be sure that both latches are fully engaged and locked.
- 2. Stop engine to install drive belt. See power unit operator's manual for drive belt installation and tension adjustment.
- 3. Remove clip pin from support stand and raise stand to transport position. Secure stand with clip pin.
- 4. Connect hydraulic hoses to the auxiliary couplers. If auxiliary hydraulic lever seems to operate in the wrong direction, connect the hoses in the opposite couplers.

UNMOUNTING INSTRUCTIONS

- 1. Choose a level site to remove the trencher.
- 2. Lower the support stand and secure with clip pin.
- 3. Lower the front lift. Lower the boom and apply slight down pressure.
- 4. Set parking brake and stop engine.
- 5. Disconnect hoses from the quick couplers.
- 6. Remove drive belt.
- 7. Open quick hitch latches. Start engine and back power unit away from the trencher.

OPERATING INSTRUCTIONS

- 1. Attach trencher to quick hitch front lift, placing correct drive belt around the left hitch arm.
- 2. Stop engine and install the drive belt. Adjust tension if equipped with adjustment. Remove clip pin from support stand and secure the support stand in the transport position.
- Start engine and transport the trencher to the job site
- 4. Align and position the boom of the unit with the line of trench to be dug.
- 5. Check the location of existing electric, gas or water lines before digging.
- 6. Check the area for obstacles such as loose rocks, stones, wood and other debris that could hinder proper operation of the trencher.
- 7. Lower the front lift and place the lift lever in the "FLOAT" position.
- 8. Engage the PTO carefully with engine at approximate half throttle. Slowly lower the boom to the depth of trench desired using the auxiliary hydraulic lever. (Do not place this lever in the float position.)
- 9. Carefully move the F R lever to move the unit in reverse. MOVE VERY SLOWLY!
- 10. Avoid sharp turns while digging a trench. Sharp turns place extreme loads on the trencher attachment.
- 11. In the event the digging chain gets wedged between rocks or caught in a root or other solid object, be ready to disengage the PTO drive. Raise the boom to clear the obstacle before trying to restart the PTO.



IMPORTANT!

THE TRENCHER IS DESIGNED TO DIG
WHILE THE UNIT IS TRAVELING IN REVERSE
DIRECTION. DO NOT ATTEMPT TO DIG
WITH THE UNIT TRAVELING IN A FORWARD
DIRECTION.

A DANGER

DO NOT OPERATE WITH BYSTANDERS IN THE AREA. UNEXPECTED TRENCH CAVE-IN OR ANY ACTION CAUSING PERSONS TO CONTACT FAST MOVING DIGGING CHAIN COULD CAUSE SERIOUS INJURY OR DEATH

SERVICE SCHEDULE

Every 4 Hours:

• Grease the boom pivot tube.

Daily:

- Check for any signs of loose bolts and tighten as needed.
- Check digging chain for missing or broken cutters. Repair as needed. Check digging chain tension.
- Wash boom, digging chain and auger at the end of each workday.

25 hour:

- In addition to daily service, lubricate the roller chain with chain lube or SAE 30 motor oil.
- Check gearbox oil level. Oil level is 4 inches down from the top of filler tube. Use #90 gear oil

100 hour:

 Change gearbox oil at 100 hours or four weeks initially, and every 2500 hours or six months of operation thereafter. Use #90 gear oil.

ADJUSTMENTS

Drive belt tension:

 See the power unit operators manual for adjustment of drive belt tension.

Roller chain drive:

Adjustment is by a spring loaded idler.

Digging chain tension:

 Adjust with large set screw in the center of boom. Loosen jam nut and tighten set screw until chain has 1/4 inch to 1/2 inch gap when lifted from the boom at mid—point. Tighten jam nut.

Crumber adjustment:

 The crumber should be close to, but not touching, the digging chain at any time. The unit may need to be moved out as the digging chain stretches. Choose from three mounting hole positions.

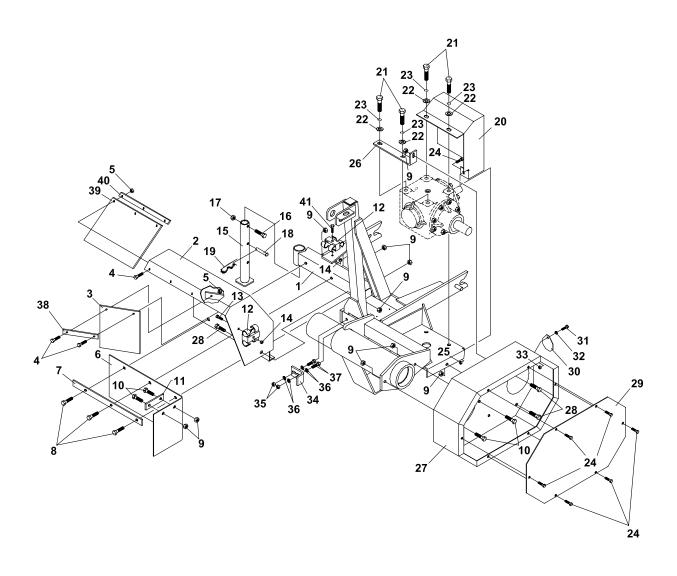
NOTE:

DO NOT OVERTIGHTEN CHAIN. This will cause undue wear on the boom components.

Replacing digging chain:

- 1. Loosen four bolts through the boom.
- Loosen jam nut on the set screw in the center of the boom and back out the set screw to allow the boom to retract.
- 3. Remove the old chain and replace with the new chain.
- Tignten the set screw until the chain is snug.
 Tighten the jam nut. Tighten the bolts that were loosened in Step 2.
- 5. Check new digging chain tension (as described above) after it has run for 20 minutes, and every hour of use for the next 4 hours.

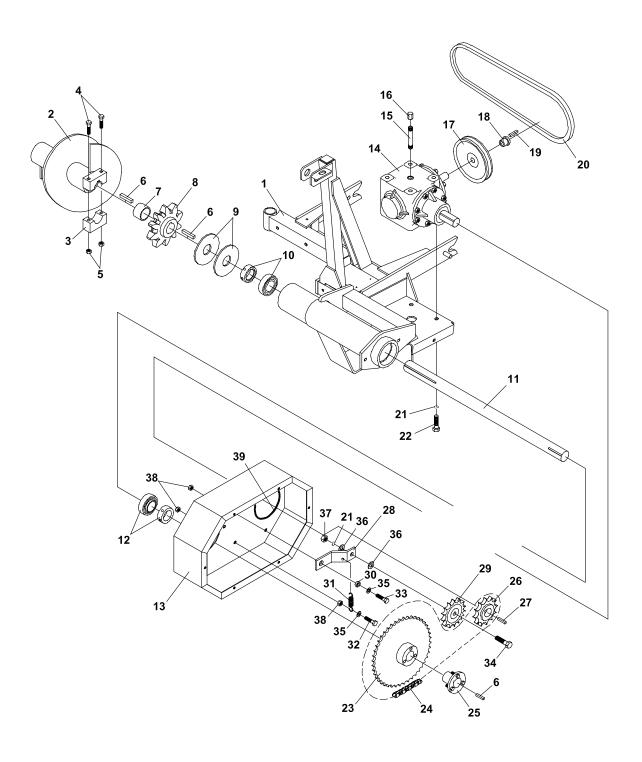
NOTE: It is normal for a new chain to require frequent tightening.



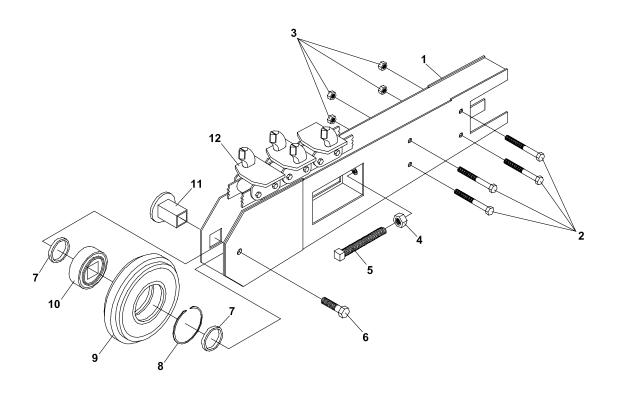
ITEM	PART NO.	DESCRIPTION	QTY
1-1	4164531	S-FRAME	1
	00-223	LBL-DANGER STAND CLEAF	R 1
1-2	60-625.7	SHIELD-AUGER	1
*	4116761	LBL-MADE IN USA	1
1-3 1-4 1-5 1-6 1-7 1-8 1-9 1-10 1-11 1-12 1-13 1-14 1-15 1-16 1-17 1-18 1-19	44-140 64139-08 64141-6 44-141 64-855.7 64123-75 64141-4 64139-24 64-849.7 4134161 01-014 64025-29 64-834.7 64123-87 64229-03 03-0616 02-PP0313 4164529 00-025	DEFLECTOR BELTING, DIRT BOLT-5/16-18X3/4 NUT, 5/16-18 BELTING, AUGER STRAP, BELTING BOLT, 3/8-16X3 HEX NUT-WLF 3/8-16 BLT-WLF 3/8-16 X 1 CLAMP, BELTING TUBE AND HOSE CLMP 1/4" SCREW, MACHINE 8-32 X 1 NUT-HEX #8-32 KEPS FOOT STAND W/A BOLT-HEX 3/8-16X1-3/4 LOCKNUT-NYLON 3/8-16 CLEVIS PIN, 3/8 X 2 PIN, 3/16 x 1.5/8 S-SHIELD, DRIVE BELT LBL-HANDS & FEET	5 5 1 1 3 10 4 1
1-21 1-22 1-23 1-24 1-25 1-26 1-27 * *	90-0808 64163-67 64006-05 64139-02 64141-2 64-848.7 4164530 00-093 00-223 64139-21 4164528	BOLT WASHER516X1X12GA LOCKWSHR-HELICAL 1/2 BLT-WLF 1/4-20X1/2 NUT-WLF 1/4-20 BRACE, CHAIN SHIELD S-GUARD, CHAIN LBL-WARN OWNR MAN LBL-DANGER STAND CLEAF BLT-WLF 3/8-16X3/4 S-COVER, CHAIN GUARD	3
*	00-093	LABEL-WARN OWN MAN COVER, ACCESS BOLT-HEX 1/4-20X3/4	1
1-30	60-629.7		1
1-31	64123-89		1

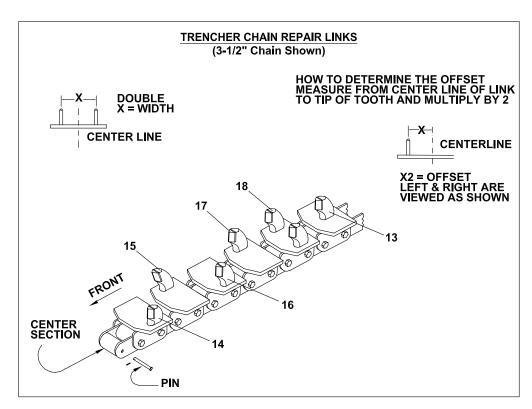
ITEM	PART NO.	DESCRIPTION	QTY
1-32	64163-03	WSHR256ID X.62OD X 18	1
1-33	64229-01	LOCKNUT-NYLON 1/4-20	1
1-34	64-851.7	CLAMP, BOOM SWIVEL	1
1-35	64229-02	LOCKNUT-NYLON 5/16-18	2
1-36	64163-02	WSR321/.328X.593/.608X1	1 4
1-37	64123-55	BLT-HEX 5/16-18X3	2
1-38	64-847.7	CLAMP, BELTING	1
1-39	44-142	BELTING, RUBBER	1
1-40	64-861.7	STRAP, AUGER BELTING	1
1-41	64152-61	8-32 X 1 1/4 MACH SCRW	1

^{*} NOT ILLUSTRATED



ITEM	PART NO	. DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
2-1 2-2 2-3		S-FRAME AUGER, TRENCHER W/A CLAMP-AUGER W/ 80-192.7	1 1 1				
2-4 2-5 2-6 2-7	64229-03 64164-26 64-854 (USED WIT 64-924	BOLT-HEX 3/8-16X3-1/2 LOCKNUT-NYLON 3/8-16 KEY-3/8x3/8x1-1/2 SQ SPACER-AUGER TH STANDARD DIGGING CHA SPACER-AUGER TH 5-1/2" CHAIN KIT)	2 2 3 1 IN) 1				
2-17 2-18	60-630.7 55-1108KR 80-253 55-RA108F 4164530 87-175 29-079 24-033 83-BK85H D3032 64164-11	R BRG-FAFNIR W/COLLAR SHAFT-DRIVE RR BRG-FAFNIR W/COLLAR S-GUARD, CHAIN GEARBOX, RIGHT ANGLE PIPE NIPPLE, 1/2 X 1.1/2 PIPE CAP, 1/2" PULLEY-8.5" H1 BUSHING BUSHING, H 7/8 KEY-3/16X3/16X1-1/4 SQ BELT-B51	(1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
2-21 2-22 2-23 2-24	83-60Q40	BOLT SPROCKET, 60Q40 2CHAIN-#60 42" CONNECTOR LINK #60	5 4 1 1 1				
2-25 2-26 2-27 2-28 2-29 2-30 2-31 2-32 2-33 2-34 2-35 2-36 2-37 2-38 2-39	83-H60122 64164-10 40-322.7 83-6015E0 85-B29 41-020	BUSHING-Q1 X 1-1/2" 0SPRKT-FIXED BORE 1-1/4 1/4X1/4X1-1/4 MACH KEY ARM, IDLER 8IDLER SPRKT #60 15TTH 1/ BUSHING, 406 X.740 X.258 SPRING BOLT-HEX 3/8-16X1-1/2 BOLT-HEX 3/8-16X1 BLT-HEX 1/2-13X2 WSHR .81X.406X16GA WASHER516X1X12GA HEX, NUT 1/2-13 NUT-WLF 3/8-16 TRIM SEAL 12"	1 1				

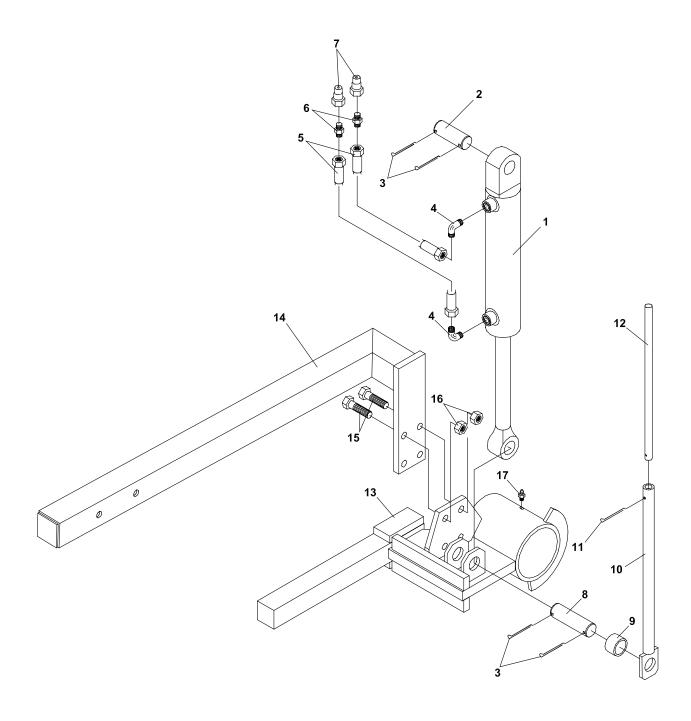




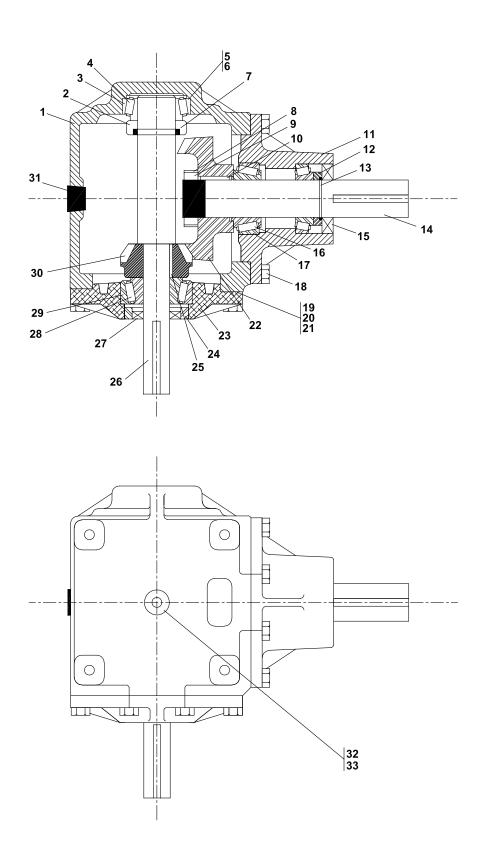
BOOM & CHAIN ASSEMBLY

TRENCHER

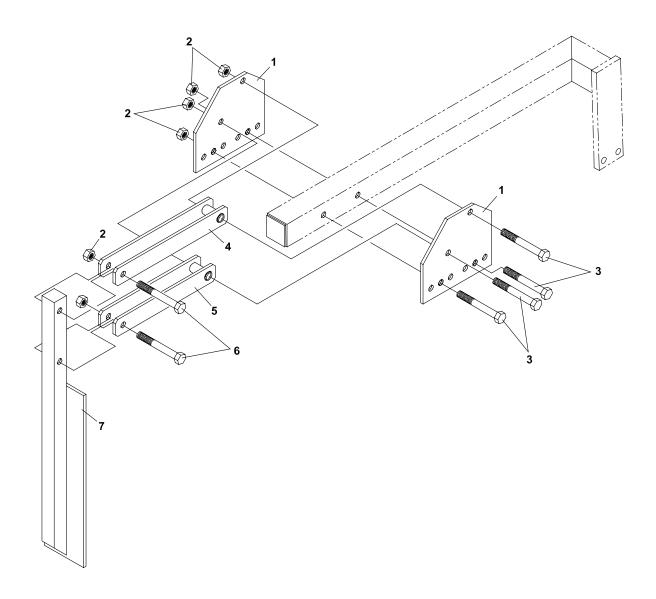
ITEM	PART NO	. DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
3-1	62-821.7 (INCLUDES	BOOM S ITEMS 2 - 11)	1	3-13	79-090 (CENTER 0	REPAIR SECTION CUT)	1
3-2	90-0826	BOLT,1/2-13 X 3-1/4	4	3-14	79-091	REPAIR SECTION 3"	1
3-3	64141-13		4		(LH STRAIC	GHT)	
3-4	92-12	NUT,3/4-10	1				
3-5		2 SET SCREW-3/4 X 5	1	3-15	79-092	REPAIR SECTION 3"	1
3-6 3-7		BOLT-3/4 X 1-1/4	1 2		(RH STRAI	GHT)	
3-7 3-8	87-110-054	SNAP RING	1	3-16	79-103	REPAIR SECTION	1
3-0 3-9			1	3-10	(OFFSET L		'
	87-125-009		1		(OIT OLT L	Li 1)	
3-11		IDLER SHAFT	1	3-17	79-104	REPAIR SECTION	1
3-12		CHAIN-DIGGING 4-3/4"	1	• • • •	(OFFSET R		·
	(STANDAR	D)			`	,	
*	70-125	KIT-3-1/2" TRENCHER CHI	N 1	3-18	79-102	REPAIR SECTION	1
	(OPTIONAL	,			(3-1/2" DOL		
	62-861.7	CRUMBER WLDMT	1		4-3/4" CHA	IN REPAIR LINKS	
		CHAIN-3-1/2" WIDE	1				
*	70-117	KIT-5-1/2" TRENCHER CHI	N 1	*	79-101	REPAIR SECTION	1
	(OPTIONAL		4		(4-3/4" DOU	,	
	64-924	SPACER-AUGER	1 1		5-1/2" CHA	IN REPAIR LINKS	
	79-099	CHAIN-5-1/2" WIDE 3-1/2" CHAIN REPAIR LINK	•	*	79-093	REPAIR SECTION	1
		5-1/2 CHAIN REPAIR LINK	.3		(4" DOUBLI		1
					(+ DOODE	-)	
				*	79-095	REPAIR SECTION	1
					(5" DOUBLI		
					`	,	
				*	79-096	REPAIR SECTION	1
					(5-1/2" DOL	JBLE)	
					т.	IOT II I HOTE ATER	
					* N	IOT ILLUSTRATED	



ITEM	PART NO	. DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
4-1	23-070	CYLINDER, HYD. 2 X 8	1				
	21-13055X		1				
4-2	64-852	TOP PIN	1				
4-3	02-CP0512	COTTER PIN, 5/32 X 1-1/2	4				
4-4	25-2103-6-	6 FITTING-90 DEG.	2				
4-5	20-017	HOSE-1/4 X 70	2				
4-6	25-0103-4-	6 FITTING-STR	2				
4-7	23-004	MALE QUICK COUPLER	2				
4-8	64-853	BOTTOM PIN	1				
4-9	64-846	SPACER, DEPTH GAUGE	1				
4-10	64-839.7	DEPTH GAUGE W/A	1				
4-11	02-CP0410	COTTER PIN, 1/8 X 1-1/4	1				
4-12	56-073	GAUGE, DEPTH	1				
4-13	62-822.7	FRAME, BOOM PIVOT W/A	1				
4-14	4164527	S-SAFETY TUBE W/A	1				
	00-224	LABEL	3				
	(DANGER	FOR TRENCHER)					
4-15	99-K56	BOLT-FLANGE 1/2-13X1-1/2	2 4				
4-16	64141-13	NUT WLF 1/2-13	4				
4-17	85010N	S/B GREASE FITTING	1				



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
5-1	87-CM000182	2 HOUSING	1				
5-2	87-CM450064	1 COLLAR	1				
5-3	87-CM150144	BEARING CUP	2				
5-4	87-CM150136	BEARING CONE	2				
5-5		3 SHIM (.010)	VARIES				
5-6	87-CM370015	5 SHIM (.005)	VARIES				
		RETAINING RING					
5-8	87-CM410233	3 LOCKWASHER	1				
5-9	87-CM410255	5 LOCKNUT	1				
5-10	87-CM60003	I KEY	1				
5-11	87-CM050237	7 HUB	1				
5-12	87-CM450585	5 COLLAR	1				
5-13	87-CM620088	RETAINING RING	1				
5-14	87-CM200287	7 SHAFT	1				
5-15	87-CM300251	I SEAL	1				
5-16	87-CM150151	I BEARING CONE	1				
		BEARING CUP	1				
5-18	87-CM410163	SEMS CAP SCREW	/ 16				
5-19	87-CM39002	I GASKET (.015)	1				
5-20	87-CM390039	9 GASKET (.005)	1				
5-21	87-CM390195	5 GASKET (.003)	1				
5-22	87-CM101030	GASKET (.015) GASKET (.005) GASKET (.003) GEAR THRU CAP	1				
5-23	87-CM055327	7 THRU CAP	1				
5-24	87-CM452326	6 COLLAR	1				
	87-CM60017		1				
5-26	87-CM222810	THRU SHAFT	1				
	87-CM301473		1				
5-28	87-CM150557	BEARING CONE	1				
5-29	87-CM150540	BEARING CUP	1				
5-30	87-CM101048	3 PINION	1				
5-31	87-CM410027	7 PIPE PLUG (SOLID) 2				
		IPE NIPPLE, 1/2 X 1.	,				
	24-033 P		1				



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
6-1	64-858.7	PLATE-CRUMBER SIDE	2				
6-2	64229-05	LOCKNUT, 1/2-13 NYLON	6				
6-3	90-0826	BOLT,1/2-13 X 3-1/4	4				
6-4	62-825.7	LINK-TOP WLDMT	1				
6-5	62-826.7	LINK-BOTTOM WLDMT	1				
6-6	64123-72	BLT-HEX 1/2-13X2-1/2	2				
6-7	62-824.7	WLDMT-CRUMBER	1				
	(USED WIT	TH STANDARD DIGGING CH	lAIN)				
	62-861.7	WLDMT-CRUMBER	1				
	(USED WIT	TH 3-1/2" CHAIN)					

