



# Model HR 9 Rotavator

## ILLUSTRATION AND PARTS LIST

MODEL \_\_\_\_\_ HR 9 \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

TILLAGE WIDTH \_\_\_\_\_

When ordering parts:

State part number, model, tillage width and serial number.

# Model HR 9 Rotavator

## ILLUSTRATION AND PARTS LIST

When ordering parts:  
State part number, model, tillage width and serial number.

### TABLE OF CONTENTS

SAFETY & INSTRUCTIONAL DECALS .....	1
UNIVERSAL JOINT ASSEMBLY & SAFETY CLUTCH .....	2-3
TRANSMISSION.....	4-5
JACKSHAFT, CHAIN & ROTOR DRIVE.....	6-7
ROTOR, BLADES & ROTOR STUB AXLE.....	8-9
MAIN FRAME ASSEMBLY .....	10-11
NUMERICAL PARTS LIST .....	12

# SAFETY AND INSTRUCTIONAL DECALS



**CAUTION:** These decals are placed at strategic positions on the tiller to provide the operator with a constant reminder of safe operating practices. "DANGER" means there is the possibility of severe injury if instructions are not followed. If decals become damaged or lost, replace them immediately. They may be obtained from your dealer. The part number and location on the machine is listed under each decal.

## IMPORTANT

### (INFORMATION FOR MACHINE FITTED WITH FRICTION CLUTCH DRIVE)

The clutch on this shaft is adjustable. To protect tractor, you must set the correct spring tension before use. The clutch should slip when, and only when, the blades strike an obstruction. Continuous or excessive slippage will cause premature clutch wear or damage, for which the manufacturer will not be responsible. For clutch adjustment instruction refer to owner's Handbook.

Clutch Adjustment Decal - 601561  
Located on clutch guard.



## DANGER

### ROTATING DRIVE LINE

FAILURE TO HEED THESE WARNINGS MAY RESULT IN PERSONAL INJURY OR DEATH.

**KEEP CLOTHING, YOURSELF AND OTHERS WELL CLEAR**

DO NOT OPERATE UNLESS PTO GUARDS, TRACTOR MASTER SHIELD AND IMPLEMENT GUARDS ARE IN PLACE.

PTO GUARDS MUST TURN FREELY AND BE PROPERLY ATTACHED AND MAINTAINED.

U-JOINT YOKES MUST BE SECURELY LOCKED ONTO TRACTOR AND IMPLEMENT SHAFTS.

BE SURE TRACTOR DRAWBAR AND IMPLEMENT HITCH ARE ADJUSTED CORRECTLY.

GREASE TELESCOPING SHAFT REGULARLY TO MINIMIZE THRUST FORCES.

A-7232-A

Rotating Drive Line DANGER Decal - 900983  
Located on U-joint telescoping shield.



## DANGER

**Do not touch blades when engine is running!**

Blade DANGER Decal - 601709  
Located on lower left side of trailing shield.

## IMPORTANT

TRACTOR LIFT LINKAGE OR HYDRAULIC LEVER LIFTING LIMIT STOPS MUST BE ADJUSTED TO PREVENT DAMAGE TO UNIVERSAL JOINTS FROM EXCESSIVE ANGLE WHEN IMPLEMENT IS FULLY LIFTED WITH P.T.O. ENGAGED.

Tractor Linkage Decal - 600203  
Located on right side of top deck.



## WARNING

1. For your own safety, and that of others, read and understand the "Operator's Manual" before attempting to operate this machine. (If manual is not available, contact your authorized dealer.)
2. All shields including power take off shields must be kept in place.
3. Disengage power take off and stop engine before adjusting, lubricating, cleaning, or unclogging machine.
4. Wait for all movement to stop before servicing the machine.
5. Keep hands, feet, and clothing away from power driven parts.
6. Keep off of machine and keep all others off.
7. Make certain everyone is clear of machine before starting engine or operation.

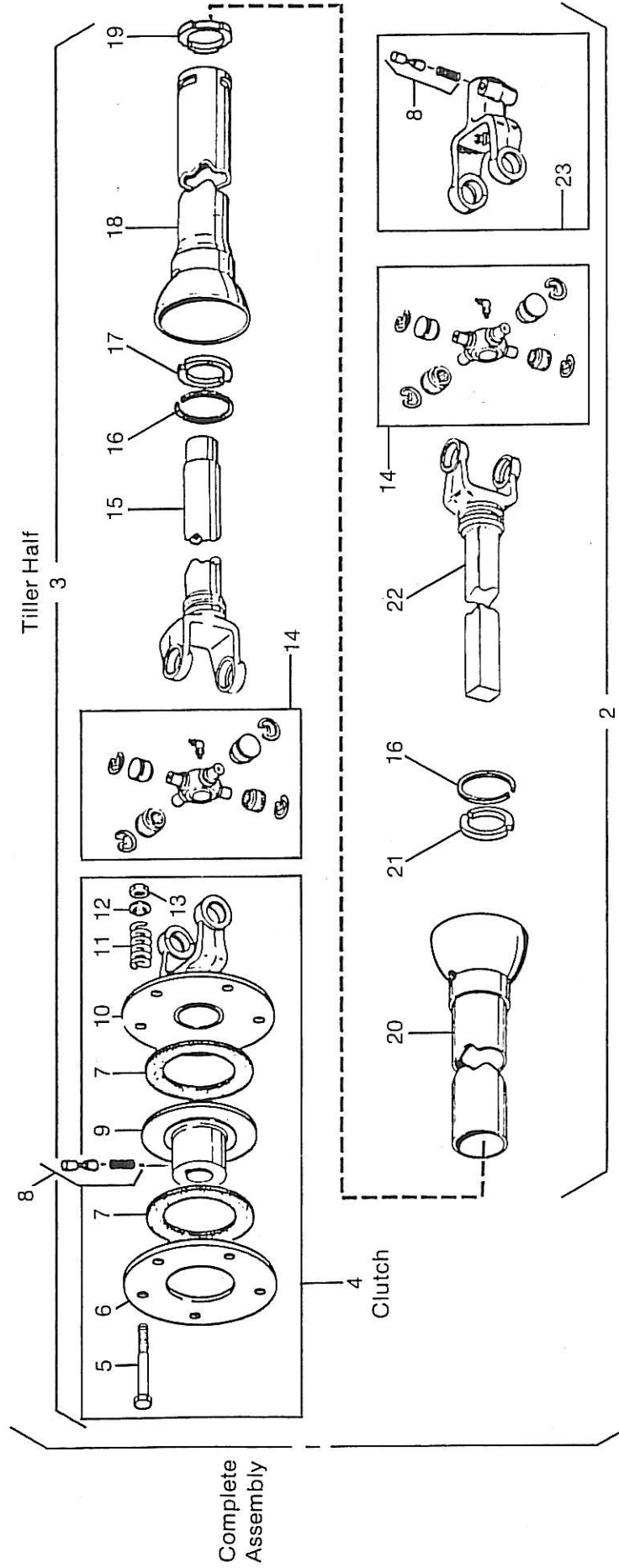
7 Point Warning Decal - 601708  
Located on right side of top deck.

## IMPORTANT

**FILL GEARBOX TO CORRECT OIL LEVEL BEFORE USING**

Fill Gearbox Decal - 600204  
Located behind gearbox on gearbox support channel.

# UNIVERSAL JOINT ASSEMBLY & SAFETY CLUTCH ILLUSTRATION A



# UNIVERSAL JOINT ASSEMBLY & SAFETY CLUTCH

## PARTS LIST A

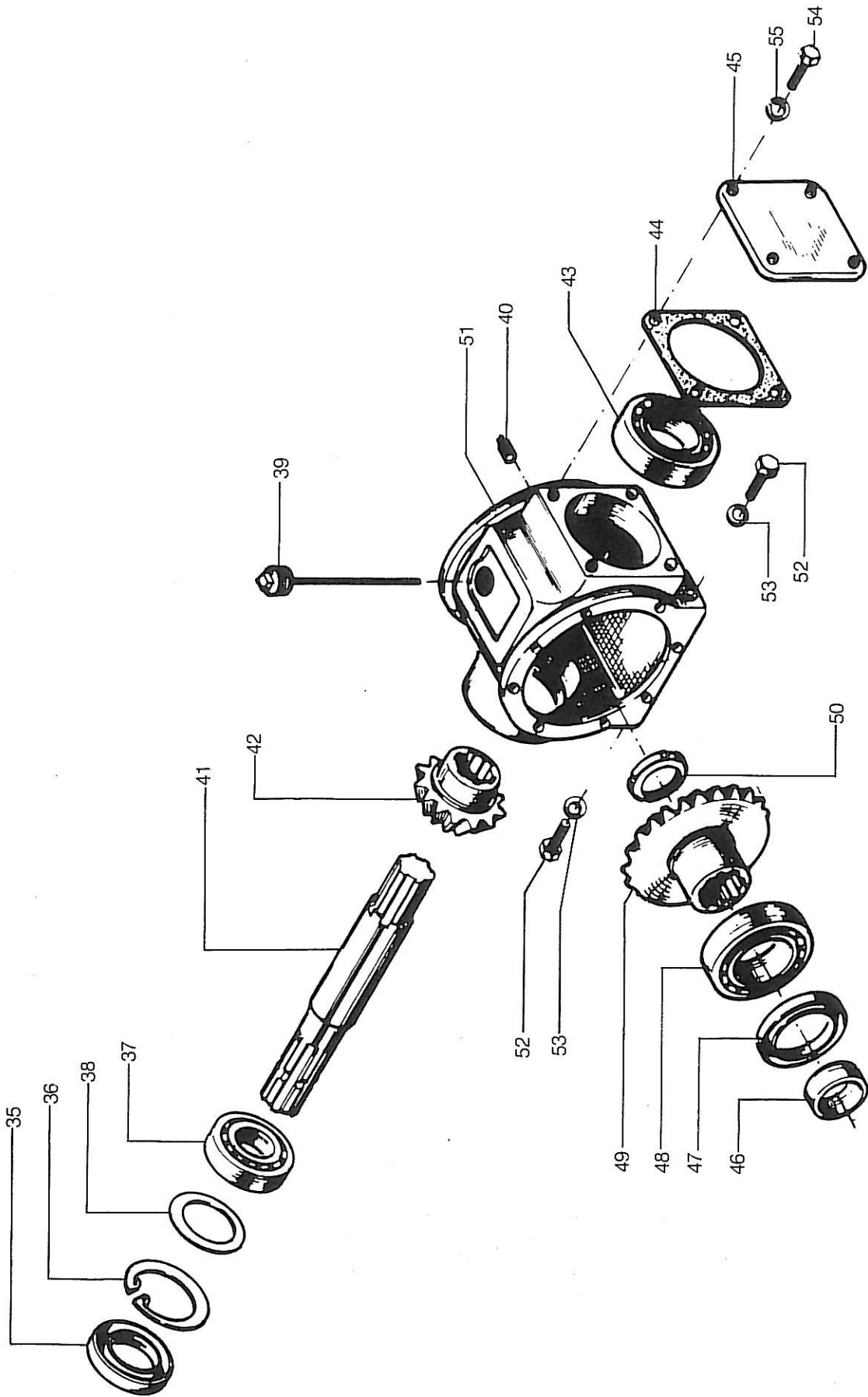
ILL. No.	PART No.	DESCRIPTION	QTY.
1	602471	U.J. Drive Assembly c/w clutch, inner shield, and 1-3/8", 6-spline yoke	1
2	602487	U.J. Drive Tractor Half c/w outer shield and 1-3/8", 6-spline yoke	1
3	602478	U.J. Drive Tiller Half c/w shield and clutch	1
4	602479	Clutch Assembly Complete	1
5	101206325	Hex Bolt 3/8" - 16 x 4" Gr. 5	6
6	600453	Pressure Plate	1
7	600451	Friction Disc	2
8	600261	Pin and Spring Kit	2
9	600452	Drive Hub Assembly	1
10	602480	Yoke and Plate	1
11	602481	Spring	6
12	602482	Special Washer	6

ILL. No.	PART No.	DESCRIPTION	QTY.
13	107206155	Locknut 3/8" - 16	6
14	602483	Gross and Bearing Kit	2
15	602484	Yoke and Tube	1
16	600252	Bearing Retainer	2
17	602485	Nylon Bearing	1
18	602486	Inner Shield Tube	1
19	600253	Nylon Centralizer	1
20	602488	Outer Shield Tube	1
21	600251	Nylon Bearing	1
22	602489	Yoke and Shaft	1
23	602490	Yoke(1-3/8", 6-spline) c/w pin and spring kit	1
	26 thru 34	Not Allocated	

State part number and machine serial number when ordering parts.

# TRANSMISSION ILLUSTRATION B



# TRANSMISSION

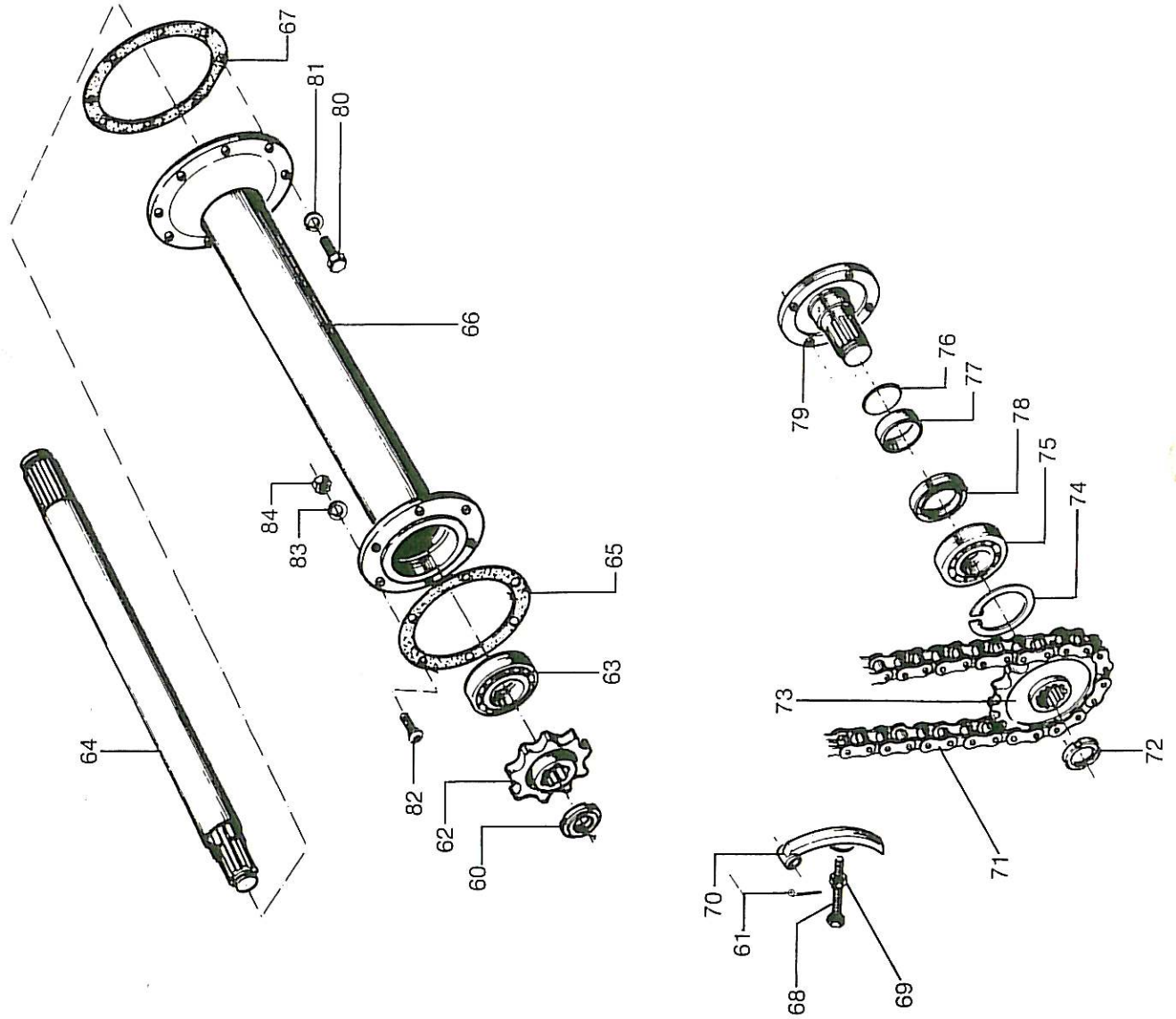
## PARTS LIST B

ILL. No.	PART No.	DESCRIPTION	QTY.	ILL. No.	PART No.	DESCRIPTION	QTY.
35	267235123	Oil Seal 72 x 35 x 12mm	1	47	268055081	Oil Seal 80 x 55 x 10mm	1
36	208101410	Internal Circlip 72 x 2.5mm	1	48	255590231	Taper Roller Bearing - 32011	1
37	<del>255038690</del> 253572107	Taper Roller Bearing - 30207	1	49	328457	Crownwheel (23-tooth)	1
38	203038690	Shim 72 x 56 x 0.2mm	1	50	208056920	Special Nut M35	1
39	642019	Filler Plug and Dipstick	1	51	328368	Gearbox (case only)	1
40	203031050	Drain Plug	1	52	301212355	Hex Bolt M12 x 35 Gr. 8.8	4
41	328371	Input Shaft	1	53	209019330	Elastic Washer	4
42	328456	Pinion (13-tooth)	1	54	301210255	Hex Bolt M10 x 25 Gr. 8.8	4
43	255090222	Taper Roller Bearing - 30210	1	55	308100045	Spring Washer M10	4
44	647737	Gasket 1mm	1		56 thru 59	Not Allocated	
45	647701	Cover Plate	1				
46	647733	Sleeve	1				

State part number and machine serial number when ordering parts.

# JACKSHAFT, CHAIN & ROTOR DRIVE

## ILLUSTRATION C





# JACKSHAFT, CHAIN & ROTOR DRIVE

## PARTS LIST C

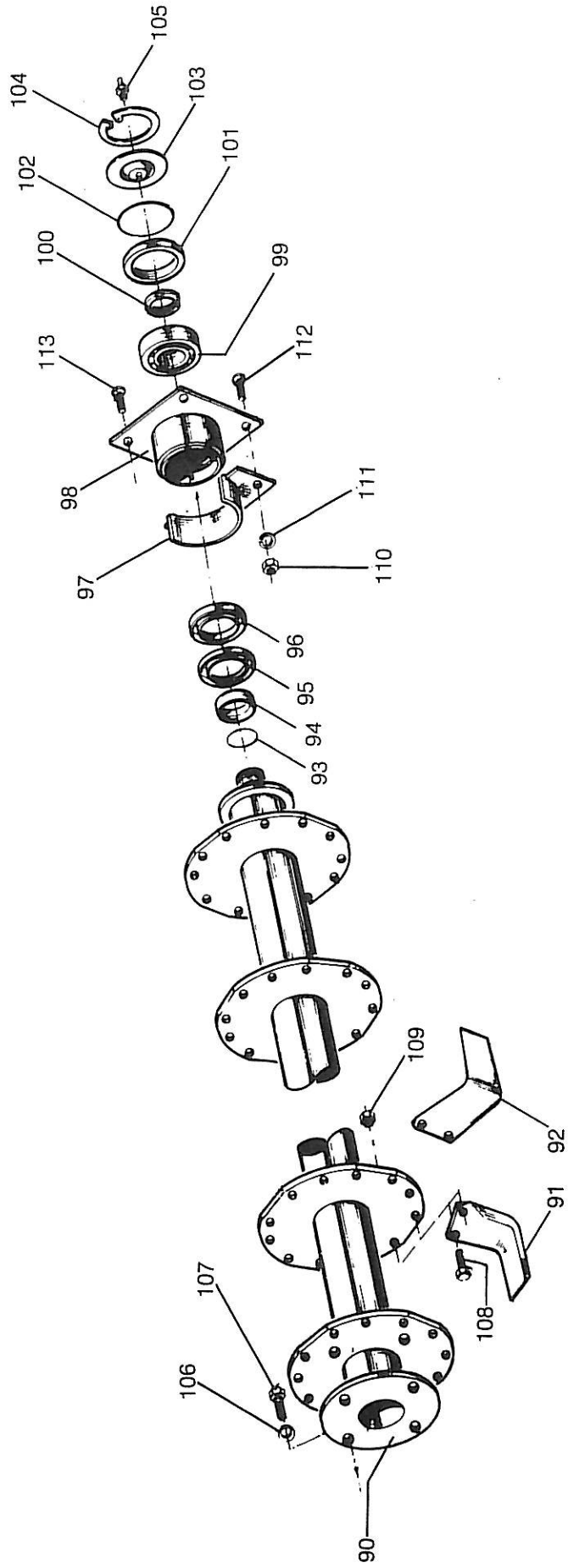
ILL. No.	PART No.	DESCRIPTION	QTY.
60	208056920	Special Nut M35	1
61	208016000	Split Pin 5/32" x 1"	1
62	647822	Jackshaft Sprocket (11-tooth)	1
63	254080201	Taper Roller Bearing - 30208	1
64	182043 182044	Jackshaft 50" model Jackshaft 60" model	1 1
65	647860	Gasket	1
66	647828 647829	Jackshaft Housing 50" model Jackshaft Housing 60" model	1 1
67	328083	Shim Gasket	2
68	301416805	Chain Adjusting Bolt	1
69	307216015	Hex Nut M16	1
70	647040	Chainskid	1
71	602566	Roller Chain - No. 100 x 36 pitches	1
72	208056880	Special Nut M40 x 1.50	1

ILL. No.	PART No.	DESCRIPTION	QTY.
73	647821	Rotor Sprocket (16-tooth)	1
74	208001510	Internal Circlip 100 x 3mm	1
75	254510251	Ball Bearing - 6309	1
76	202070880	O-Ring 55 - 2.5mm	1
77	624013	Oil Seal Ring	1
78	268565162	Oil Seal 85 x 65 x 17.5mm	1
79	647824	Rotor Drive Shaft	1
80	301210305	Hex Bolt M10 x 30 Gr. 8.8	8
81	308100045	Spring Washer M10	8
82	339210305	Bolt M10 x 30	6
83	308100045	Spring Washer M10	6
84	307210015	Hex Nut M10	6
	85 thru 89	Not Allocated	

State part number and machine serial number when ordering parts.

# ROTOR, BLADES & ROTOR STUB AXLE

## ILLUSTRATION D



# ROTOR, BLADES & ROTOR STUB AXLE PARTS LIST D

ILL. No.	PART No.	DESCRIPTION	QTY.
90	602556 602557	Rotor 50" model Rotor 60" model	1 1
91	9900	Blade, L.H. (L-type) 50" model Blade, L.H. (L-type) 60" model	15 18
92	9901	Blade, R.H. (L-type) 50" model Blade, R.H. (L-type) 60" model	15 18
N.I.	9953	Blade, L.H. (C-speed type) 50" model Blade, L.H. (C-speed type) 60" model	15 18
N.I.	9954	Blade, R.H. (C-speed type) 50" model Blade, R.H. (C-speed type) 60" model	15 18
93	202070420	O-Ring 35 x 2.5mm	1
94	624007	Oil Seal Ring	1
95	267250052	Oil Seal 72 x 50 x 5mm	1
96	267250083	Oil Seal 72 x 50 x 8mm	1
97	626764	Ground Skid	1
98	626751	Bearing Housing	1
99	253580211	Ball Bearing - 6307 S/	1
100	208056920	Special Nut M35	1

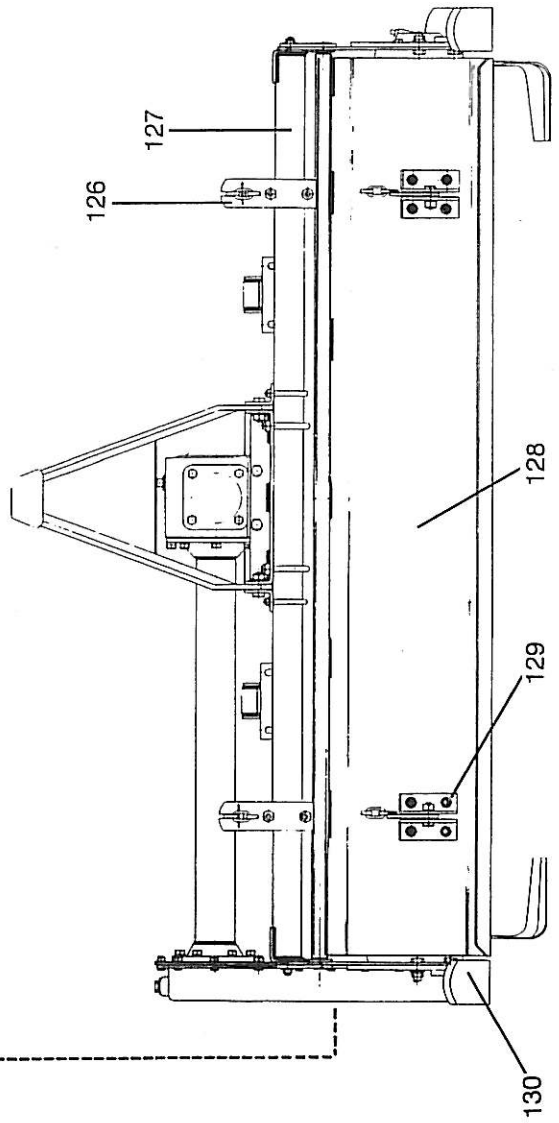
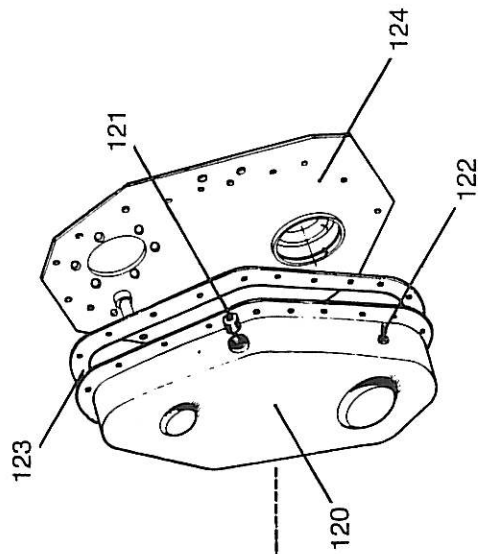
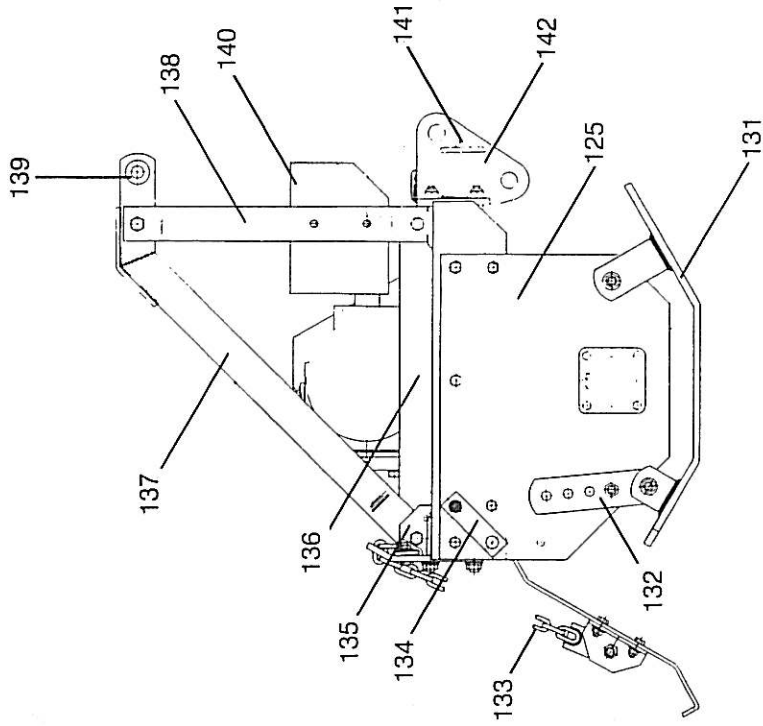
  

ILL. No.	PART No.	DESCRIPTION	QTY.
101	626753	Sleeve	1
102	202071220	O-Ring 74.5 x 3mm	1
103	626754	Cover	1
104	208001320	Internal Circlip 80 x 2.5mm	1
105	202030870	Grease Fitting	1
106	308160045	Spring Washer M16	4
107	309316305	Hex Bolt M16 x 30 Gr. 8.8	4
108	69667	Blade Bolt (Special Hex Bolt 7/16" x 1-1/8" UNF) 50" model Blade Bolt (Special Hex Bolt 7/16" x 1-1/8" UNF) 60" model	60 72
109	107017330	Gripco Crownlock Nut 7/16" UNF 50" model Gripco Crownlock Nut 7/16" UNF 60" model	60 72
110	307210015	Hex Nut M10	4
111	308100045	Spring Washer M10	4
112	339210305	Bolt M10 x 30	2
113	339210255	Bolt M10 x 25	2
	114 thru 119	Not Allocated	

N.I. - Not Illustrated

State part number and machine serial number when ordering parts.

# MAIN FRAME ASSEMBLY ILLUSTRATION E



# MAIN FRAME ASSEMBLY

## PARTS LIST E

ILL. No.	PART No.	DESCRIPTION	QTY.	ILL. No.	PART No.	DESCRIPTION	QTY.
120	647798	Chaincase	1	N.I.	101406075	Hex Bolt 3/8" x 7/8" UNC Gr. 5	18
121	203031190	Filler and Chain Adjustment Plug	1	N.I.	107206315	Hex Gripco Flange Nut 3/8" Location: Trailing Shield (8)	18
122	203031050	Oil Level Plug	1	N.I.		L.H. End Plate (5)	
123	642039	Chaincase Gasket	1	N.I.		R.H. End Plate (5)	
124	602551	End Plate, L.H.	1	N.I.	101206105	Hex Bolt 3/8" x 1-1/4" UNC Gr. 5	2
125	602552	End Plate, R.H.	1	N.I.	107206315	Hex Gripco Flange Nut 3/8" UNC Location: Shield Adjustment Chain to Chain Retainer	2
126	602449	Chain Retainer	2	N.I.			
127	602558	Main Frame 50" model	1	N.I.	101206085	Hex Bolt 3/8" x 1" UNC Gr. 5	2
	602559	Main Frame 60" model	1	N.I.	107206315	Hex Gripco Flange Nut 3/8" UNC Location: Trailing Shield Hinge Pin	2
128	602437	Trailing Shield 50" model	1	N.I.	101208105	Hex Bolt 1/2" x 1-1/4" UNC Gr. 5	4
	602436	Trailing Shield 60" model	1	N.I.	107208315	Hex Gripco Flange Nut 1/2" Location: Skid Adjustment Bar (2)	4
129	602443	Angle Bracket for Shield Adjustment Chain	4	N.I.			
130	602463	Depth-Control Skid, L.H.	1	N.I.			
131	602464	Depth-Control Skid, R.H.	1	N.I.	101208125	Hex Bolt 1/2" x 1-1/2" UNC Gr. 5	4
132	602465	Skid Adjustment Bar	2	N.I.	107208315	Hex Gripco Flange Nut 1/2" UNC Location: L.H. and R.H. Depth-Control Skids	4
N.I.	602466	Spacer - Adjustment Bar	2	N.I.			
133	602468	Shield Adjustment Chain	2	N.I.	101208125	Hex Bolt 1/2" x 1-1/2" UNC Gr. 5	4
134	602459	Hinge Pin	2	N.I.	108081445	Spring Washer 1/2"	4
135	602443	Angle Bracket for Topmast	2	N.I.	107208355	Hex Nut 1/2" UNC Location: Topmast and Stays to Main Frame	4
136	602419	Gearbox Mounting Channel	1	N.I.			
137	602406	Topmast	1	N.I.			
138	602447	Topmast Stay	2	N.I.	101208365	Hex Bolt 1/2" x 4-1/2" UNC Gr. 5	1
139	18831	Top Link Pin (3/4" dia.)	1	N.I.	108081445	Spring Washer 1/2"	1
N.I.	600099	Quick Pin	3	N.I.	107208355	Hex Nut 1/2" UNC Location: Topmast to Topmast Stays	1
140	602448	Clutch Guard	1	N.I.	601432	U-Bolt 3/8" UNC 2" x 2-3/4" long	2
141	18830	Lower Hitch Pin (7/8" dia.)	2	N.I.	107206315	Hex Gripco Flange Nut 3/8" UNC Location: Topmast Angle Bracket to Main Frame	4
142	602528	Lower Hitch Bracket	2	N.I.			
		<b>FASTENERS - NOT ILLUSTRATED</b>					
N.I.	125404065	Hex Bolt 1/4" x 3/4" UNC Gr. 2	4	N.I.	602475	Square-Corner U-Bolt 1/2" UNC x 2"	10
N.I.	108041015	Flat Washer 1/4"	4	N.I.	107208315	Hex Gripco Flange Nut 1/2" UNC Location: Hitch Brackets (4)	20
N.I.	107204155	Hex Gripco Nut 1/4" Location: Clutch Guard	4			Gearbox Channel (4) Chain Retainer to Frame (2)	
N.I.	101406065	Hex Bolt 3/8" x 3/4" UNC Gr. 5	16				
N.I.	101206085	Hex Bolt 3/8" x 1" UNC Gr. 5	2				
N.I.	107206315	Hex Nyloc Nut 3/8" UNC Location: Chaincase	18				

N.I. - Not Illustrated

State part number and machine serial number when ordering parts.

# NUMERICAL PARTS LIST

PART #	PG.	ILL.	PART #	PG.	ILL.	PART #	PG.	ILL.	PART #	PG.	ILL.	PART #	PG.	ILL.			
9900	9	91	602419	11	136	602486	2	18	647737	5	44	125404065	11	N.I.	267235123	5	35
9901	9	92	602436	11	128	602487	2	2	647798	11	120	202030870	9	105	267250052	9	95
9953	9	N.I.	602437	11	128	602488	2	20	647821	7	73	202070420	9	93	267250083	9	96
9954	9	N.I.	602443	11	129	602489	2	22	647822	7	62	202070880	7	76	268055081	5	47
182043	7	64		11	135	602490	2	23	647824	7	79	202071220	9	102	268565162	7	78
182044	7	64	602447	11	138	602528	11	142	647828	7	66	203031050	5	40	301210255	5	54
18830	11	141	602448	11	140	602551	11	124	647829	7	66		11	122	301210305	7	80
18831	11	139	602449	11	126	602552	11	125	647860	7	65	203031190	11	121	301212355	5	52
69667	9	108	602459	11	134	602556	9	90	101206085	11	N.I.	203038690	5	38	301416805	7	68
328083	7	67	602463	11	130	602557	9	90	101206105	11	N.I.	208001320	9	104	307210015	7	84
328368	5	51	602464	11	131	602558	11	127	101206325	2	5	208001510	7	74		9	110
328371	5	41	602465	11	132	602559	11	127	101208105	11	N.I.	208016000	7	61	307216015	7	69
328456	5	42	602466	11	N.I.	602566	7	71	101208125	11	N.I.	208056880	7	72	308100045	5	55
328457	5	49	602468	11	133	624007	9	94	101208365	11	N.I.	208056920	5	50		7	81
600099	11	N.I.	602471	2	1	624013	7	77	101406065	11	N.I.		7	60		7	83
600251	2	21	602475	11	N.I.	626751	9	98	101406075	11	N.I.		9	100		9	111
600252	2	16	602478	2	3	626753	9	101	107017330	9	109	208101410	5	36	308160045	9	106
600253	2	19	602479	2	4	626754	9	103	107204155	11	N.I.	209019330	5	53	309316305	9	107
600261	2	8	602480	2	10	626764	9	97	107206155	2	13	253038690	5	37	339210255	9	113
600451	2	7	602481	2	11	642019	5	39	107206315	11	N.I.	253580211	9	99	339210305	7	82
600452	2	9	602482	2	12	642039	11	123	107208315	11	N.I.	254080201	7	63		9	112
600453	2	6	602483	2	14	647040	7	70	107208355	11	N.I.	254510251	7	75			
601432	11	N.I.	602484	2	15	647701	5	45	108041015	11	N.I.	255090222	5	43			
602406	11	137	602485	2	17	647733	5	46	108081445	11	N.I.	255590231	5	48			

N.I. - Not Illustrated



Home Office: 102 Howard Ave., P.O. Box 7, Muscoda, WI 53573 (608) 739-3106  
Branch Office: 2348 Auburn Blvd., Sacramento, CA 95821 (916) 483-2777