

ORION

12hp.

28" Cut.

**09D1  
COMPACT TRACTOR**

# ☆ORION☆ 09D1 OPERATING AND MAINTENANCE INSTRUCTIONS

## IMPORTANT

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When starting electric start machine, place right heel on micro switch located on rear of footrest. Ensure that cutter is disengaged, otherwise electric starter motor will not engage. If engine is cold move throttle to cold start position and return to desired throttle setting when engine starts. Do not attempt to operate engine with throttle lever in cold start (choke) position. (Note electric start engines fitted with recoil can be manually started with cutter disengaged and ignition on).

Keep feet and hands clear of mowing attachment when starting and operating machine.

Do not use mowing attachment with broken or bent blades, damaged or worn bolts and nuts or damaged cutter disc, otherwise damage and premature wear will result from vibration. Replace blades, bolts and nuts only in pairs to maintain correct balance.

## DO NOT USE WITHOUT WINDROWER

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Check all bolts and nuts after first hour of running to ensure trouble free service and adjust engine to clutch belt. (Refer Instructions)

Mount and dismount only from left hand side of machine.

Reference to left or right hand side of machine is determined by sitting in the operating position on the machine.

Make sure ignition switch is turned to the off position And Key Removed For Security when machine is not in use.

## TO OPERATE

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**BEFORE STARTING:** See Engine Maintenance/Instruction Sheet.

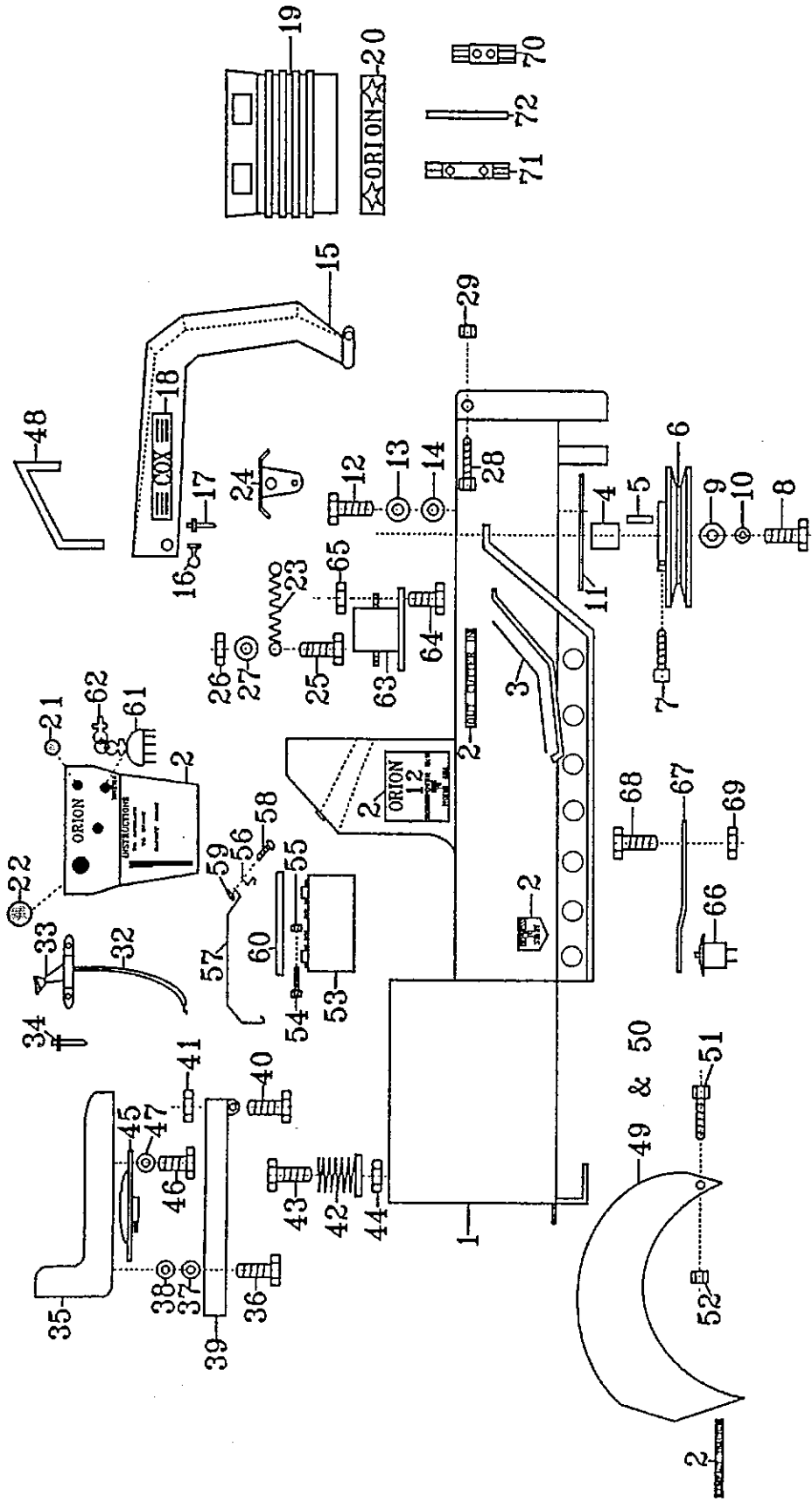
**DISENGAGING MOWING ATTACHMENT:** The disengaging lever is situated on the right hand side by the steering column. Before starting, disengage mowing attachment by pulling lever fully to the operator. For safety it is advisable at all times, other than when mowing, that the mowing attachment be kept in the disengaged position.

**TO DRIVE FORWARD/REVERSE:** Power is regulated by the throttle. Set throttle control to desired engine power. Press down on the forward section of the clutch pedal for forward movement, on the rear of the clutch pedal for reverse. The amount of pressure can be used to control the ground speed, especially in heavier conditions.

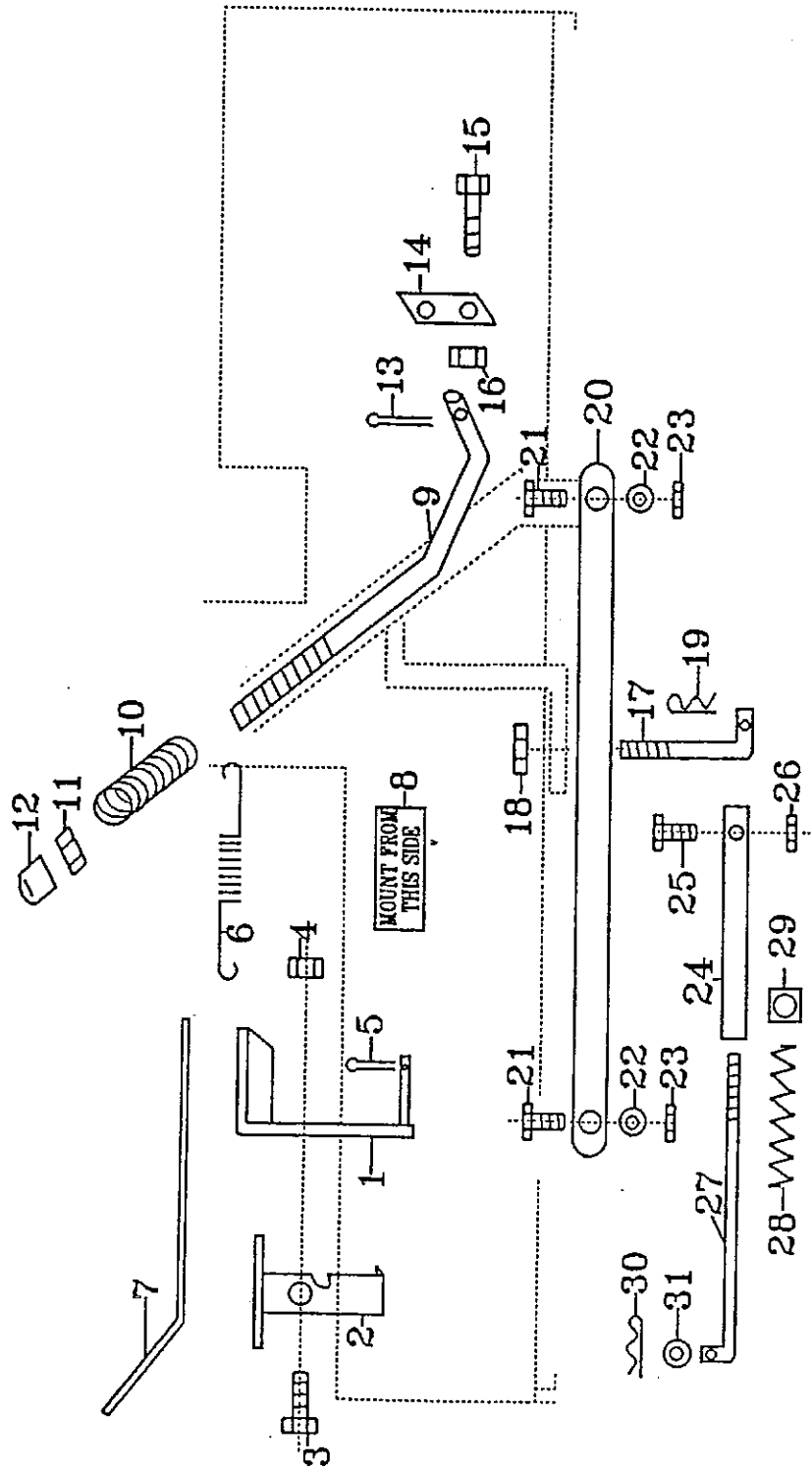
**MANOEUVRING:** Owing to the heel and toe type action of the drive pedal, it is possible to take the machine straight from forward to reverse and vice versa. This instant forward and reverse operation makes the machine very manoeuvrable and the sharpest turns can be negotiated easily and quickly.

**TO BRAKE (WITH ENGINE RUNNING):** The clutch may be used to stop the machine. If travelling forward push the pedal into reverse until machine stops, then bring the pedal back to neutral position or vice versa if travelling in reverse.

**TO BRAKE (WITH ENGINE STOPPED):** The parking brake only must be used. Otherwise damage to clutch cone will occur. Parking brake is also emergency 'stop' and transport brake.



55	N04C	Battery Terminal Bolt Nut (2) ELEC START ONLY
56	AM300	Battery Clamp ELECTRIC START ONLY
57	AM300	Battery Clamp ELECTRIC START ONLY
58	SR0420C	Battery Clamp Screw ELECTRIC START ONLY
59	N04C	Battery Clamp Screw Nut ELECTRIC START ONLY
60	AM098M8	Battery Cover ELECTRIC START ONLY
61	AM014	Ignition Switch
62	AM015	Ignition Switch Key (2)
63	AM159	Solenoid ELECTRIC START ONLY
64	SH0408C	Solenoid Mounting Bolt (2) ELEC START ONLY
65	N04CN	Solenoid Mounting Bolt Nut (2) ELEC START ONLY
66	AM092	Micro Switch ELECTRIC START ONLY
67	AM100RQ	Foot Micro Spring Plate ELECTRIC START ONLY
68	SH0408C	Spring Plate Bolt ELECTRIC START ONLY
69	N04CN	Spring Plate Bolt Nut ELECTRIC START ONLY
70	AM005G0	Spark Plug Spanner
71	AM006C1	Tube Spanner
72	AM007	Tommy Bar

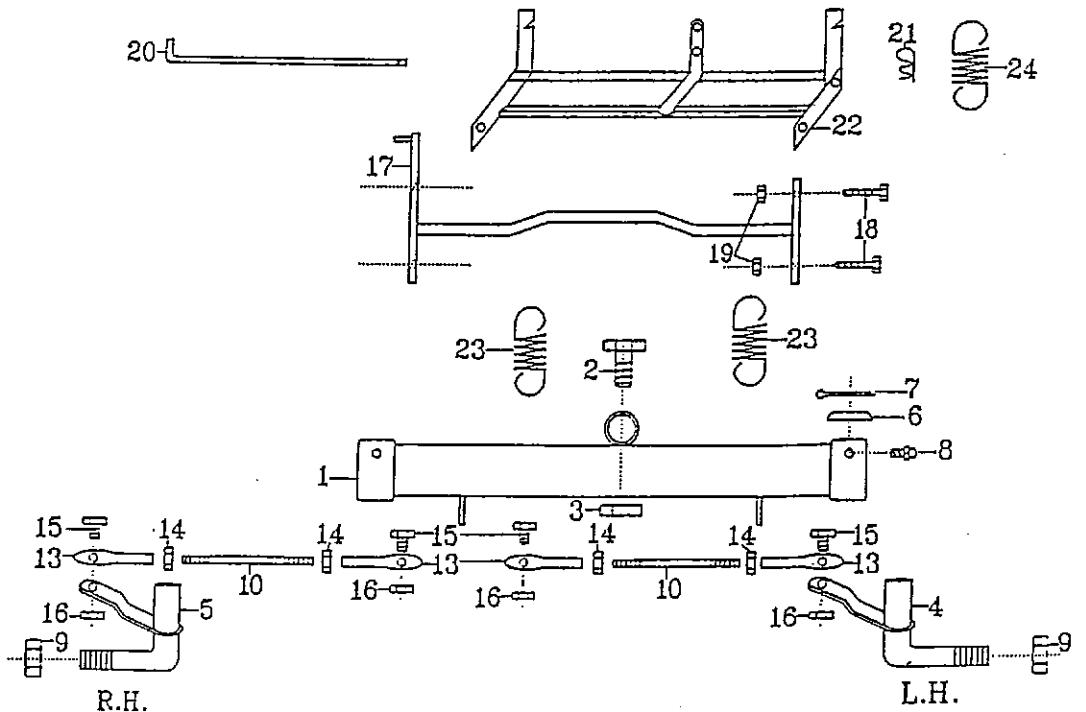


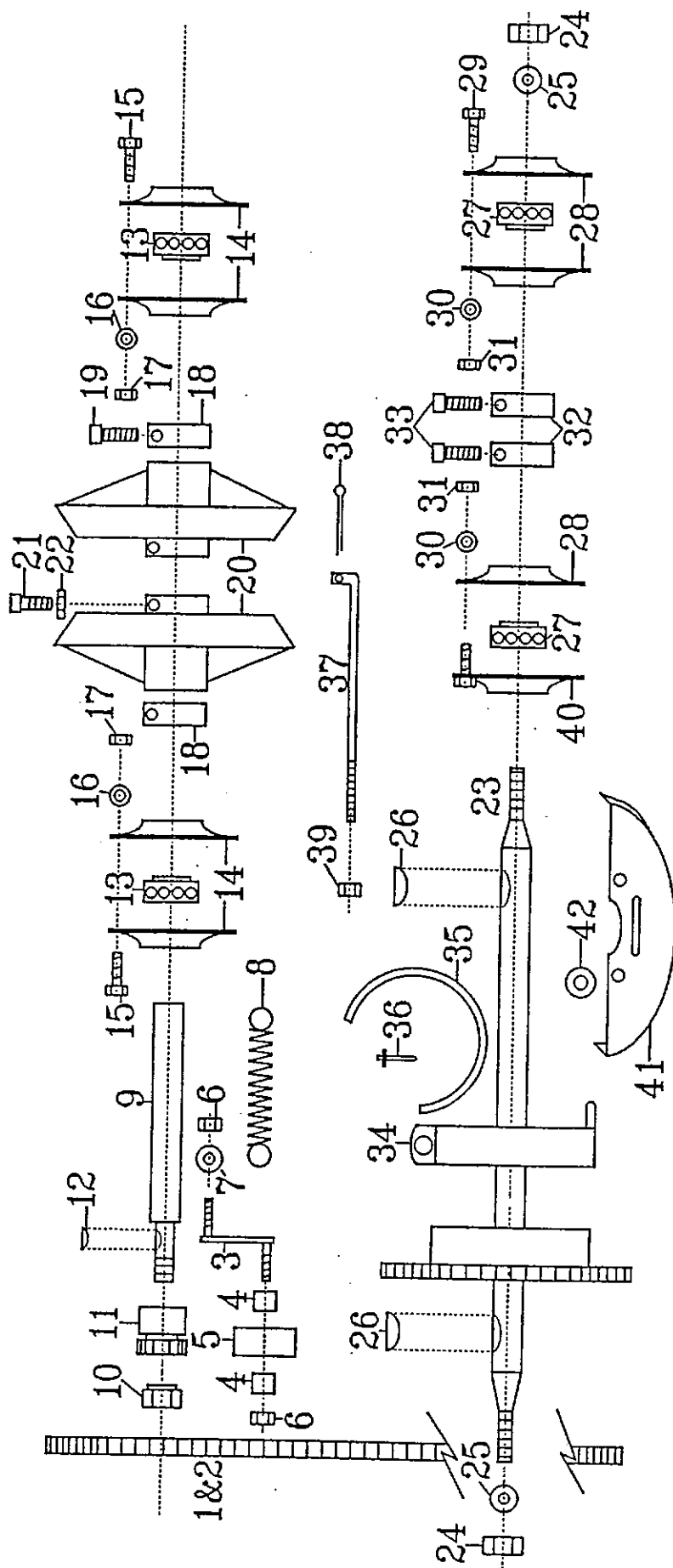


09D1 GROUP 16: FRONT AXLE COMPONENTS

Ref. No.	Part No.	Description
1	AM190	Front Axle Beam
2	B1236W	Front Axle Pivot Bolt
3	AM191	Front Axle Pivot Bolt Nut
4	AM067	Stub Axle LH
5	AM068	Stub Axle RH
6	AM069	Stub Axle Dust Cap (2)
7	CP3-225	Stub Axle Split Pin (2)
8	GNTF3	Grease Nipple (2)
9	NT20FM	Front Wheel Nut (2)
10	AM256	Tie Rod (2)
13	AM020	Tie Rod End (4)
14	N06F	Tie Rod End Lock Nut (4)
15	B0620C	Tie Rod End Bolt (4)
16	N06CN	Tie Rod End Bolt Nut (4)
17	AM192B0	Front Axle Connecting Link
18	B0620C	Connecting Link Bolt (4)
19	NF06CN	Connecting Link Bolt Nut (4)
20	AM039	Cutter Housing Pivot Rod
21	RP02	Cutter Housing Pivot Rod 'R' Pin
22	KIT62B/M	Cutter Housing Connecting Link c/w Bushes
	AM230	Cutter Housing Connecting Link Bush (2)
23	AM040	Cutter Belt Tension Spring (2)
24	AM145	Weight Compensation Spring

\*\*\* KIT 04 09 STEERING KIT



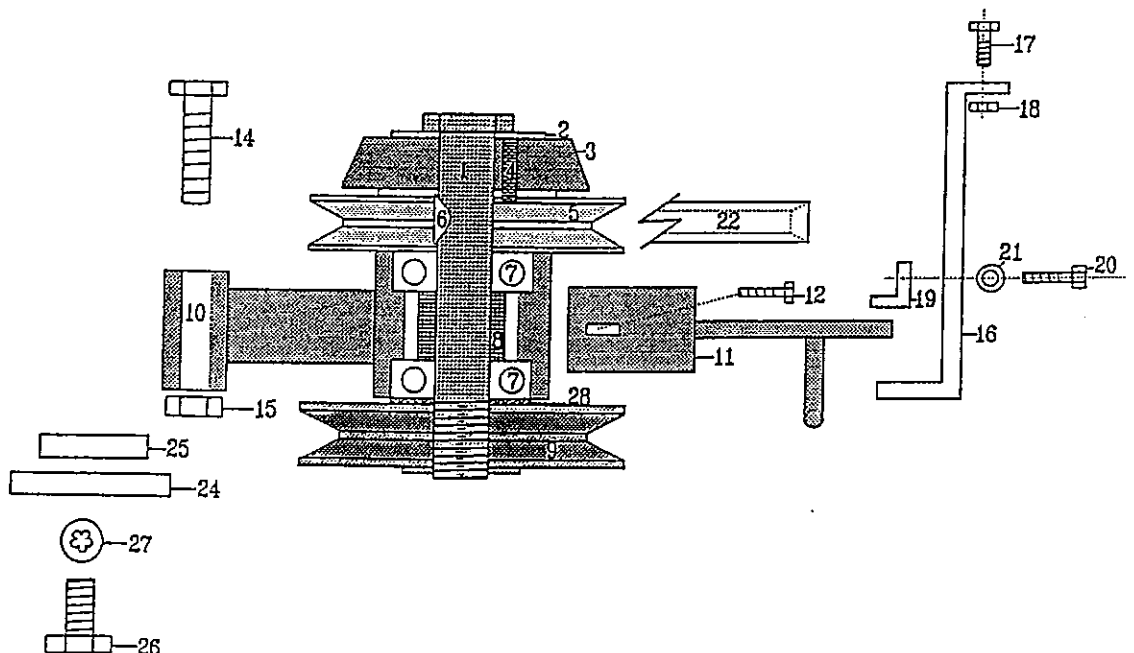


09D1 GROUP 20: CLUTCH ARM & COMPONENTS

Ref. No.	Part No.	Description
1	AM204	Clutch Shaft Incl. Nut
2	W204403	Clutch Cone Ret. Washer
3	CC20100PBO	Clutch Cone
4	AM026	Clutch Cone Pin
5	AM158	Clutch Pulley Upper
6	K09	Clutch Pulley Key
7	BB205215	Clutch Bearing (2)
8	AM072	Clutch Bearing Spacer
9	AM205	Clutch Pulley Lower
10	KIT26	Clutch Arm c/w Yoke
11	AM207	Clutch Arm Yoke N.L.A. USE KIT26
12	B0512C	Clutch Arm Yoke Ret. Bolt (2)
14	B0652C	Clutch Arm Pivot Bolt
15	N06CN	Clutch Arm Pivot Bolt Nut
16	AM206	Clutch Arm Locating Bracket
17	SH0412C	Clutch Arm Loc Bracket Bolt (2)
18	N04CN	Clutch Arm Loc Bracket Bolt Nut (2)
19	AM246	Clutch Arm Bracket Wear Plate
20	B0512C	Clutch Arm Bracket Wear Plate Bolt (2)
21	W051216	Clutch Arm Bracket Wear Plate Washer (2)
	W05S	Wear Plate S/P Washer (2)
22	VB64	Belt - Engine to Clutch
24	AM208	Clutch Adjusting Plate
25	AM209	Clutch Adjusting Tapped Plate (2)
26	B0616C	Adjusting Plate Bolt (2)
27	W06S	Bolt Lock Washer (2)
28	W203902	Clutch Pulley Bearing Washer

\*\*\* KIT64 CLUTCH ARM COMPLETE '87 ON

\*\*\* KIT26 CLUTCH ARM



09D1 GROUP 21: 28" MOWING ATTACHMENT COMPONENTS

Ref. No.	Part No.	Description
1	KIT48B/M	Cutter Housing c/w F/Guard
	AM230	Cutter Housing Bush (2)
2	AM259	Deflector
	AM272	Deflector
3	AM273	Deflector Rod
4	AM274	Deflector Ratchet Plate
	W041216	Deflector Bracket Washer
5	AM052E1	Deflector Bracket
6	SH0412C	Deflector Bracket Bolt (2)
7	N04CN	Deflector Bracket Bolt Nut (2)
9	TR56	Transfer - Warning
10	TR49	Transfer - Cutter
11	AM036D9	Cutter Housing Roller
12	AM037	Cutter Roller Shaft
13	CP3-225	Cutter Roller Shaft Split Pin
14	KIT08	Cutter Bearing Housing C/W Belt Guides
15	AM073	Belt Guides (2)
16	B0416C	Belt Guide Bolt (2)
17	N04CN	Belt Guide Bolt Nut (2)
18	B0620C	Cutter Bearing Housing Bolt (4)
19	NF06CN	Cutter Bearing Housing Bolt Nut (4)
20	AM028	Cutter Shaft
21	K09	Cutter Shaft Key
22	BB205215	Cutter Shaft Bearing (2)
23	AM029	Bearing Spacer
24	AM030	Cutter Shaft Pulley
25	W204403	Pulley Ret. Washer
26	NT20FM	Pulley Ret. Nut
27	KIT15	Cutter Brake Incl. Pad
28	AM033	Cutter Brake Pad
29	PR0205	Brake Pad Pop Rivet
30	B0520C	Cutter Brake Pivot Bolt
31	N05CN	Cutter Brake Pivot Bolt Nut
32	AM076H7	Cutter Disc
33	B0612C	Cutter Disc Ret. Bolt (4)
34	N06CN	Cutter Disc Ret. Bolt Nut (4)
35	MB150SHD	Cutter Blade - Stepped
	KIT32	Cutter Blade, Bolt & Nut Kit
	MB150AHD	Cutter Blade - Air Flow
	KIT33	Cutter Blade, Bolt & Nut Kit
37	KIT01D1	Blade Bolt & Nut Set
43	VB50	Belt - Cutter to Clutch
45	AM220	Cutter Front Guard
46	W051216	Cutter Guard Washer (3)
47	N05CN	Cutter Guard Ret. Nut (3)
***	KIT 66	DEFLECTOR KIT