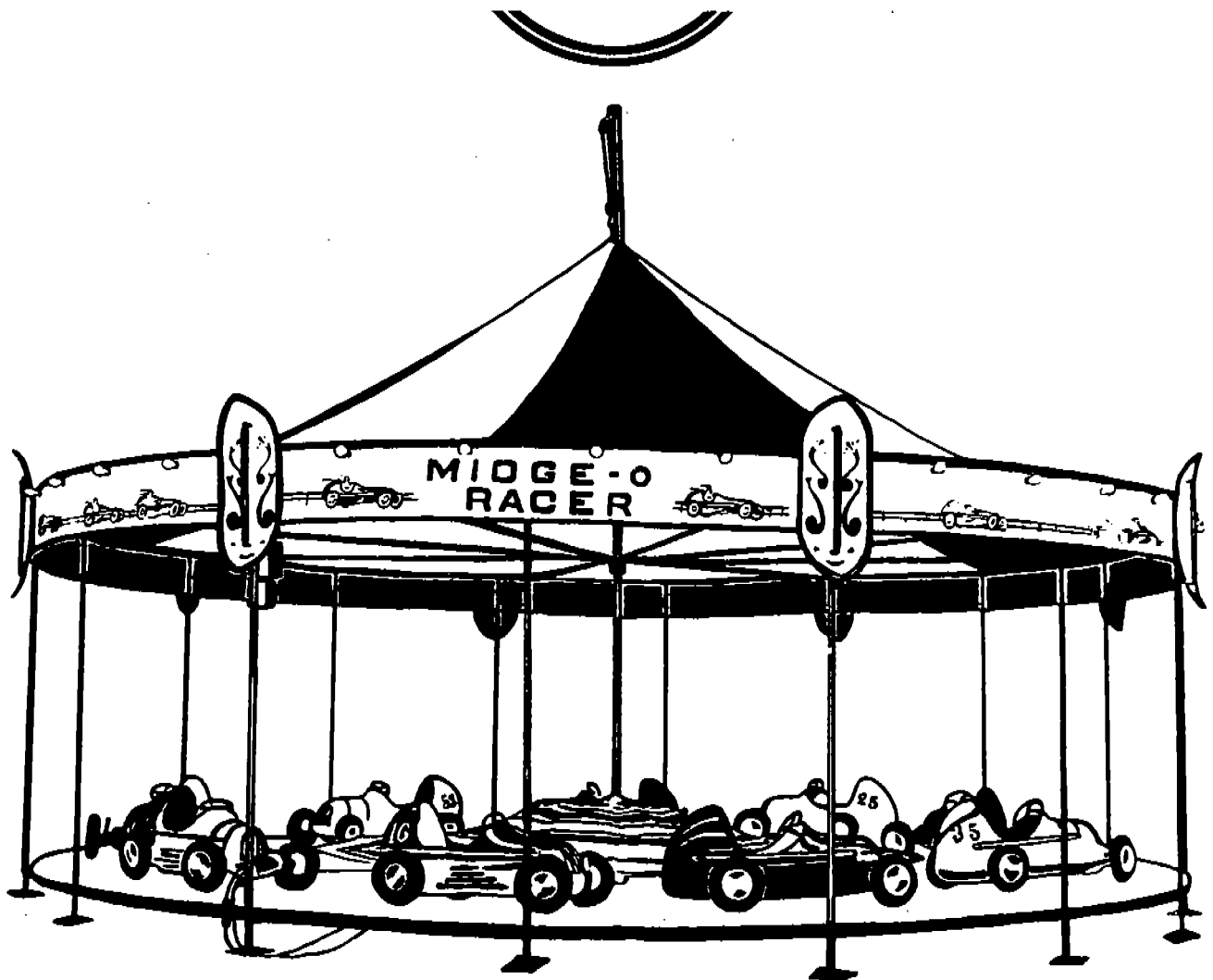


MFG: JVI INDUSTRIES  
NAME: MIDGE-O-RACES

**JVI INDUSTRIES**

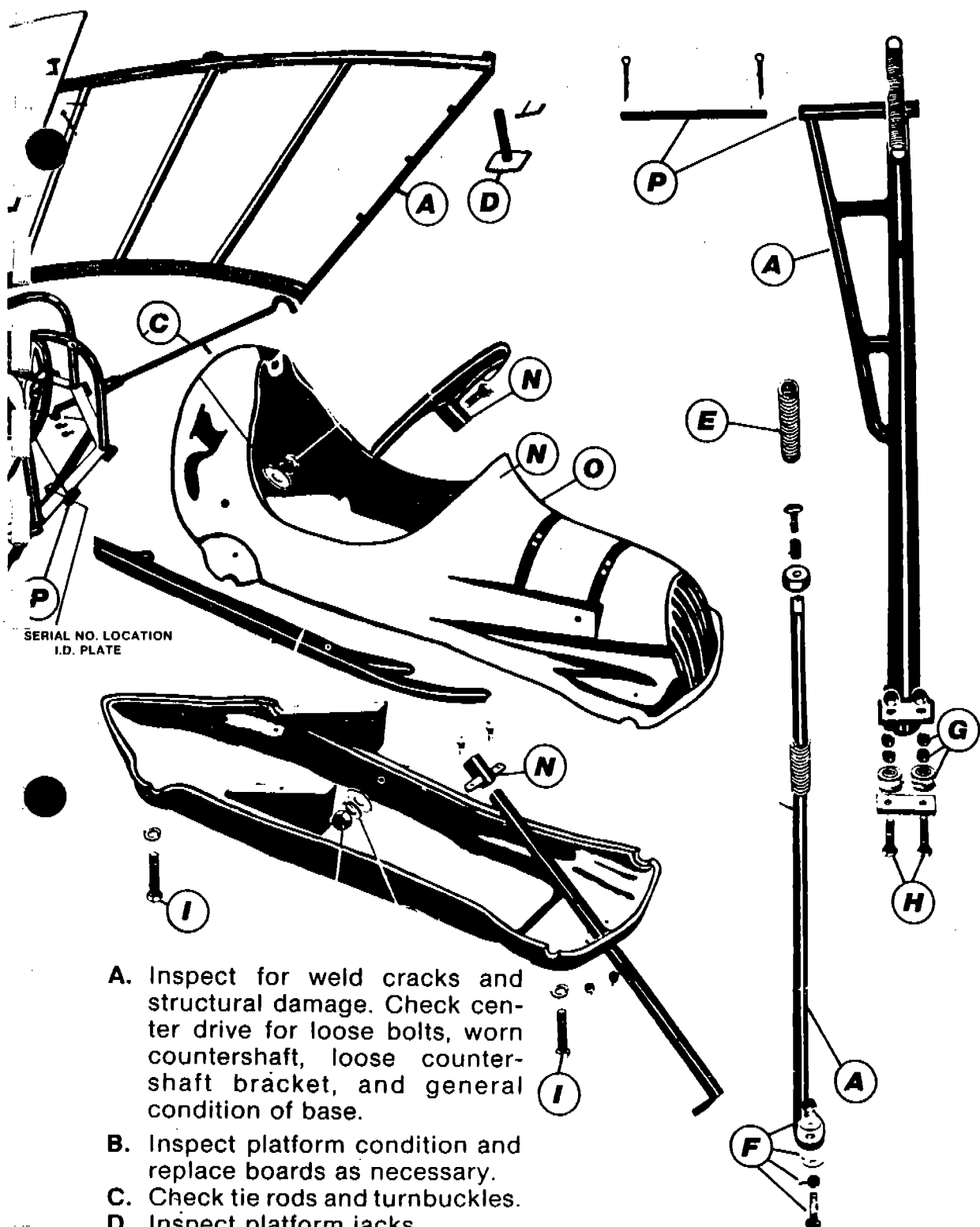
P.O. BOX 13399  
SALEM, OREGON 97309-1399



# MIDGE-O-RACER

## MANUAL & PARTS CATALOG

SALES AND SERVICE



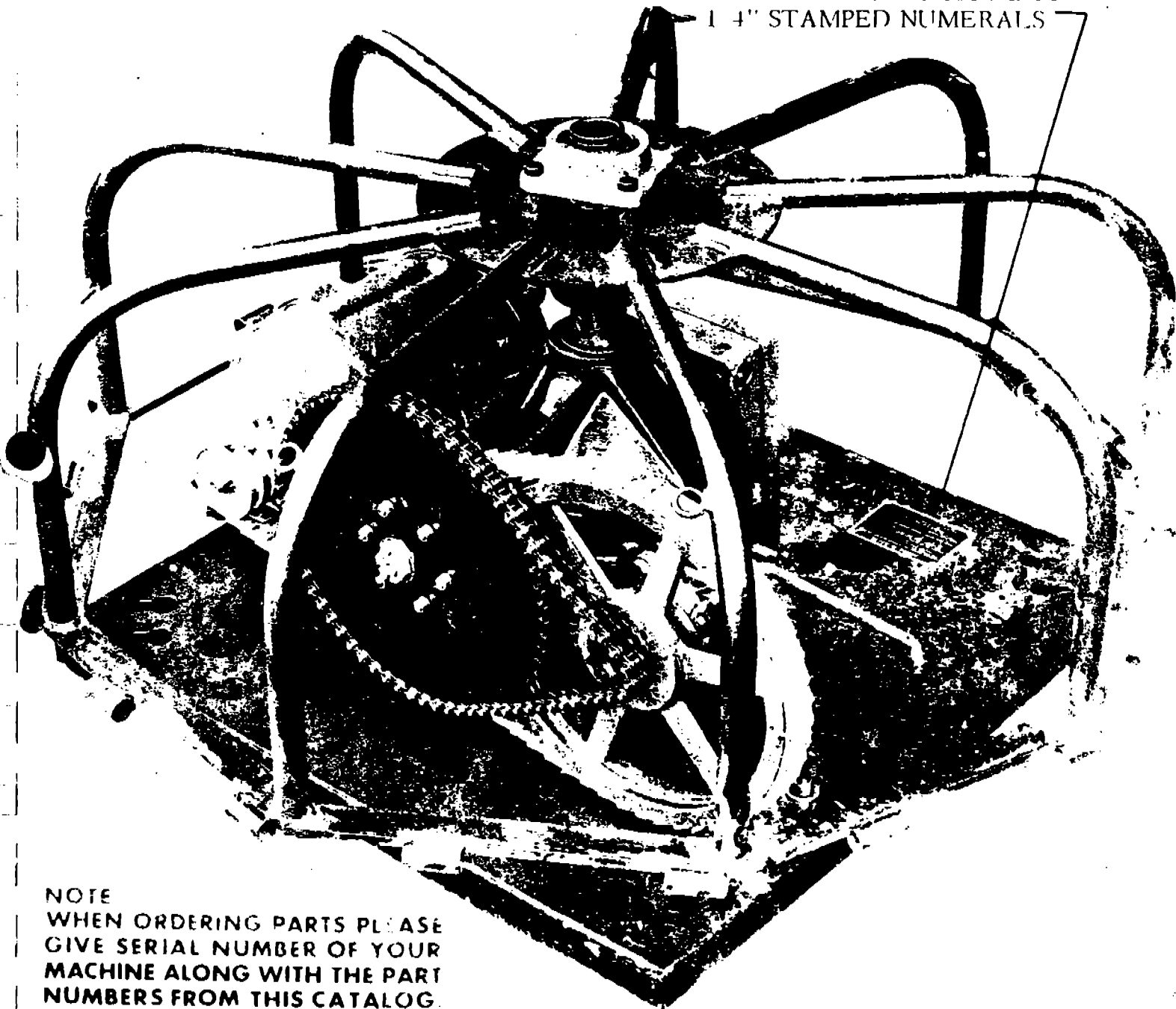
SERIAL NO. LOCATION  
I.D. PLATE

- A. Inspect for weld cracks and structural damage. Check center drive for loose bolts, worn countershaft, loose countershaft bracket, and general condition of base.
- B. Inspect platform condition and replace boards as necessary.
- C. Check tie rods and turnbuckles.
- D. Inspect platform jacks.
- E. Check tow bar for damper spring operation.
- F. Inspect attaching clevis and bushing.
- G. Inspect and replace guide rollers and bushings as necessary.
- H. Inspect condition of bolts and replace if necessary.
- I. Check axle attaching bolts.
- J. Inspect front axle for worn king pins—enlarged holes, broken or missing springs, worn bolts, or badly worn drag link.
- L. Check tires for condition.
- M. Check wheel bearings and replace as necessary.
- N. Inspect steering for worn guides, upper and lower, and loose steering wheel.
- O. Inspect condition of car and seat for usability.
- P. Inspect pin for safeties and wear.



## LOCATION OF SERIAL NUMBERS ON MIDGE-O-RACER

SERIAL NUMBERS 8001 & UP  
1 1/4" STAMPED NUMERALS

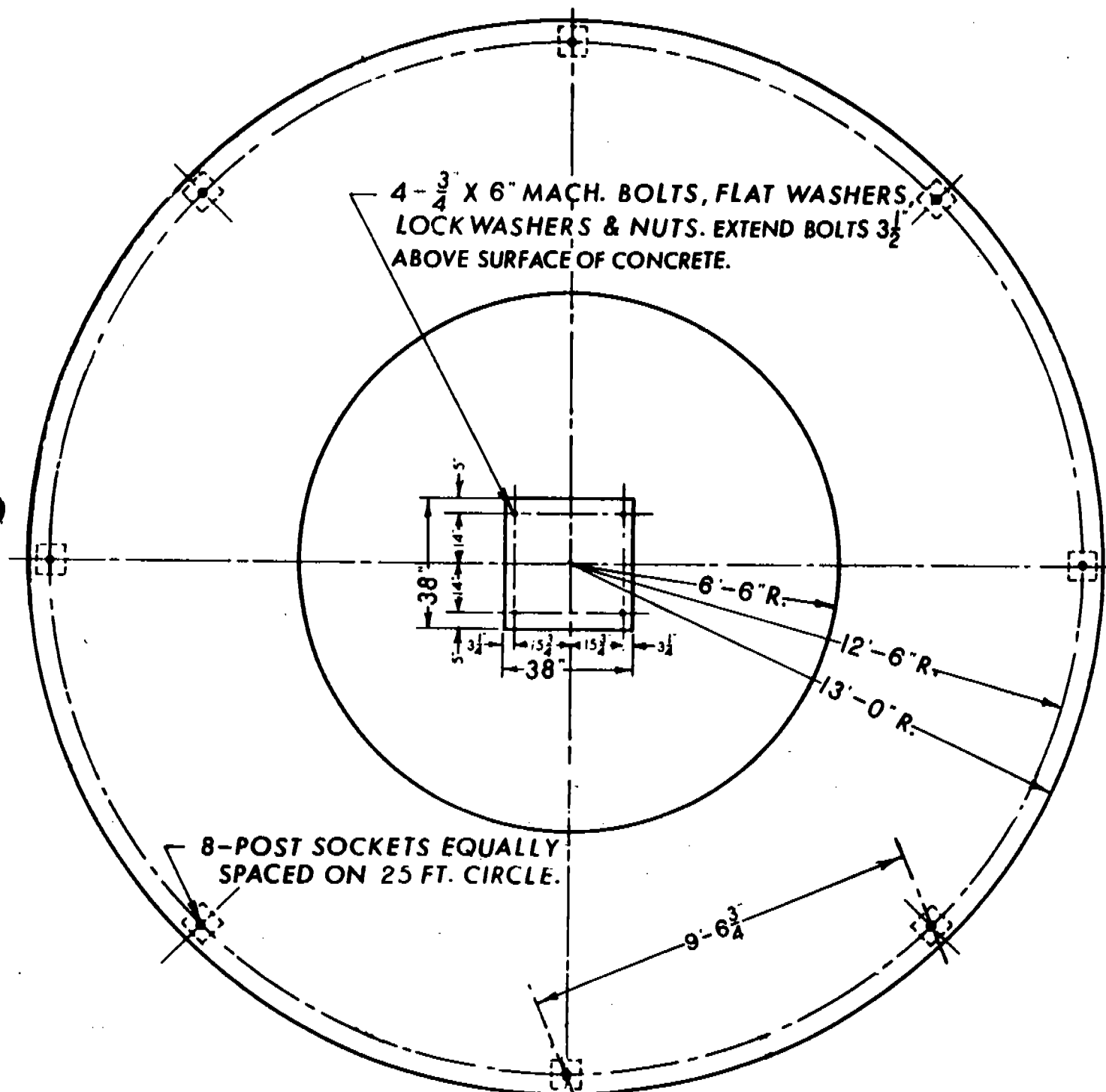


**NOTE**  
WHEN ORDERING PARTS PLEASE  
GIVE SERIAL NUMBER OF YOUR  
MACHINE ALONG WITH THE PART  
NUMBERS FROM THIS CATALOG.

THE SERIAL NUMBERS 8001 & UP ARE LOCATED  
AT THE TOP OF THE BASE PLATE OPPOSITE THE  
JET AND CHAIN DRIVE AND DIRECTLY UNDER  
THE LUBRICATION CHART, IN CASE THE LUBRI-

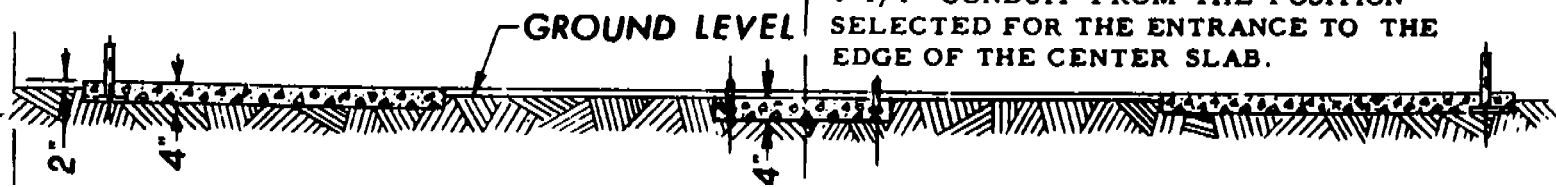
CATION CHART HAS BEEN REMOVED, THE SERIAL  
NUMBER CAN BE LOCATED BY THE FOUR  
SCREW HOLES USED TO HOLD THE PLATE IN  
PLACE.

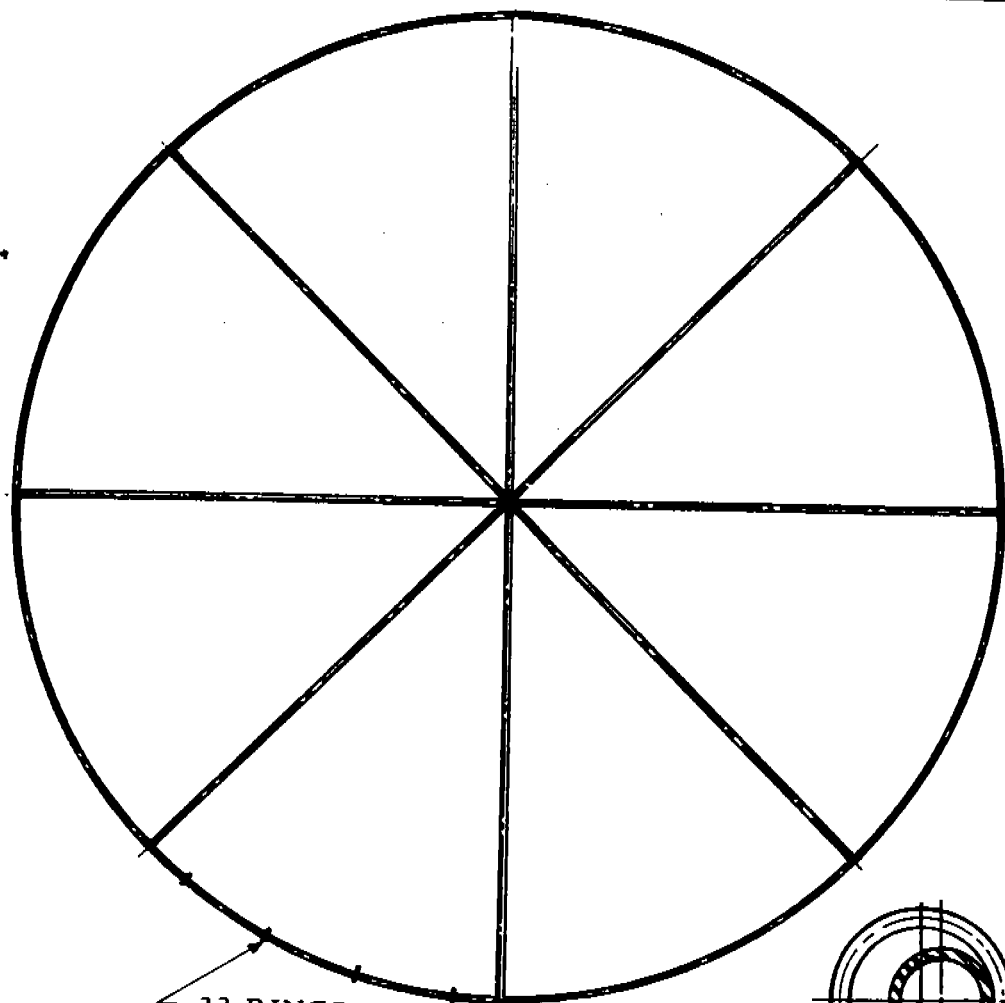
# PLAN OF CONCRETE PLATFORM FOR MIDGE-O-RACER



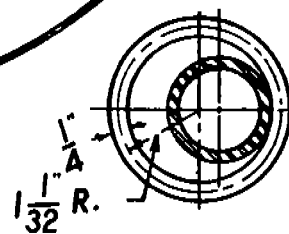
**NOTE:**

**BEFORE POURING CONCRETE, PLACE A 1-1/4" CONDUIT FROM THE POSITION SELECTED FOR THE ENTRANCE TO THE EDGE OF THE CENTER SLAB.**





32 RINGS



DETAIL OF RING

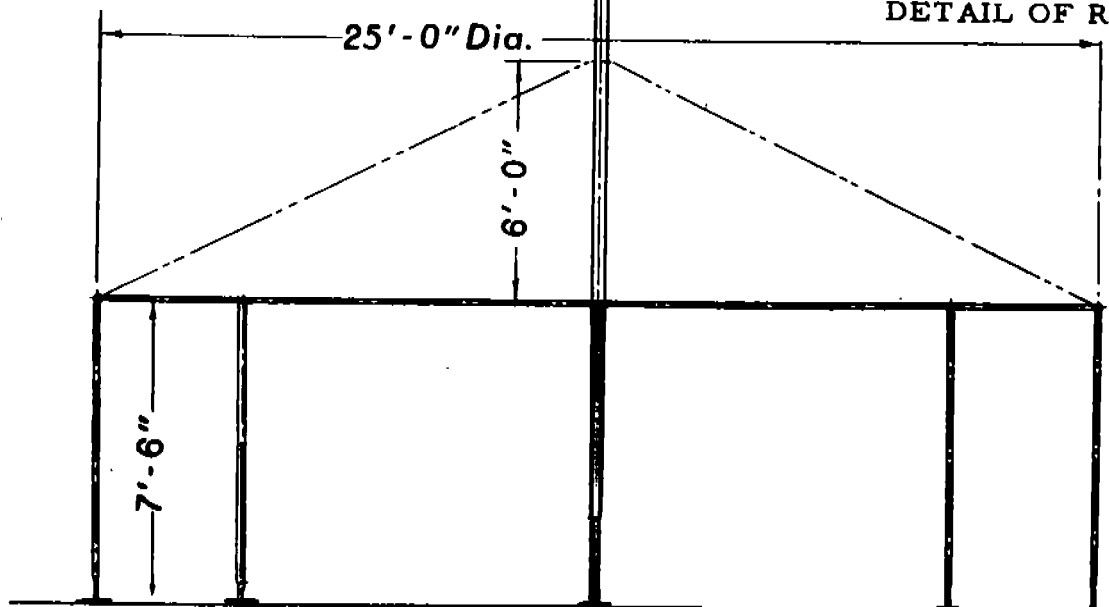


DIAGRAM OF TOP FRAME

Drawn By J.L.W. No. Req.

Supersedes Drg. No.

Date Feb. 8, 1952

Superseded By Drg. No.



Drg. No. MB-III



# INSTRUCTIONS FOR SETTING UP MIDGE-O-RACER

**POWER UNIT:** Place the power unit in the center of the area to be occupied by the ride and block it in a level position.

**CONTROL CABLES:** Plug the control cables in outlets provided in the magnetic switch mounted on the power unit and extend the outer ends in the direction selected for the entrance.

**TIE RODS:** Insert the turnbuckle ends of the tie rods into the keyhole slots provided in the base of the power unit.

**PLATFORM:** Place the platform sections in position starting with the center of the first section opposite one corner of the power unit base. Insert the jacks in sockets provided on the outer edge of platform. Connect the outer ends of tie rods to platform sections and adjust tie rods with turnbuckles to centralize and secure platform to power unit. Level platform by adjusting the jacks and block inner edge.

**SWEEPS:** Fasten the sweeps to the hub of power unit with the sweep pins and secure the pins with a cotter-key on each end. Hook the springs from the hub to the sweeps using the holes which hold the sweeps in approximately a horizontal position with the tow bars fully extended.

**SWEEP COVER:** Place the canvas sweep cover over the power unit and insert the lower center pole through the ring in the center of the sweep cover and into the bearing mounted on top of the hub. Roll the sweep cover up so that it is out of the way until ride is assembled.

**OUTER TOP POSTS:** Insert the outer top posts into the platform jacks and secure with pins. Place the post having the control switches in the position selected for the entrance facing the switches in toward the center of the ride. There are two types of posts, eight with plain ends and eight (including the switch post) provided with two sockets on the upper ends. These are placed alternate, first a double and then a plain, etc.

**RADIAL MEMBERS:** Place the radial members in position by inserting one end in sockets provided on center pole and the other end in the top of the outer posts having the double sockets. Place the member having the electrical fittings to the post supporting the control switches. The male fitting goes on the outer end and connects to the female fitting on the light disconnect switch.

**CRESTINGS:** Place the crestings in the sockets provided on the outer posts with the Midge-O sign in the entrance position. Place the medallions over the ends of the crestings thus covering the gap between the crestings. Insert the brackets in back of medallions and secure to bolt on outer posts.

**LIGHT CLUSTER:** Place the light cluster over the top of the lower center pole.

**TOP:** Place the canvas top over the radial members with the center ring over the top of the lower center pole.

**UPPER CENTER POLE:** With the rope block hooked to the top of the upper center pole place it over the upper end of the lower center pole.

**TOP:** Hook the top fasteners into the rings on the crestings and hoist the center of the top with the rope block, running the hoisting rope through the ring in the center of the top.

**LIGHT CLUSTER:** Slide the light cluster up on the upper center pole to the desired height and secure with set-screw. Plug the male fitting on the light cluster into the female fitting on the radial member.

**CARS:** Place cars on platform and connect to tow bars, making sure that the bushings are in place, allowing the connection to turn freely.

**SWEEP COVER:** Spread the sweep canvas over the sweeps and hook onto the springs provided on the ends of the sweeps.

**CONTROL CABLES:** Plug control cables leading from the power unit into the fitting at the base of control post. Then plug the 220 volt and 110 volt power leads into the fittings provided at the base of the control post.

**TIMER SWITCH:** Mount the timer switch on the control post and plug in the leads from the disconnect switch. Also plug the light fittings together on the crestings and medallions. A toggle switch on the side of the 110 volt disconnect switch controls the lights. The timer switch should always be removed from the control post and packed in a separate box during transporting. This switch should be handled with the same care that would normally be given a high-grade clock.



# MIDGE-O-RACER LUBRICATION INSTRUCTIONS

## ELECTRIC MOTOR

- (1) The Motor Bearings require a change of Lubricant yearly as follows:

Clean the Zerk Fittings and remove the Drain Plugs. Add Lubricant\* until the old grease has been forced out through the drain openings.

Run the Motor with the Drain Plugs removed until the excess grease has been expelled. Replace the Drain Plugs.

## COUNTERSHAFT BEARING

- (2) The Countershaft Bearings require Lubrication every three months.

Add enough Lubricant\* to the Zirk Fittings on Page 3, Reference No. 53, to show slightly at the Seals.

## ROLLER CHAIN

- (3) Lubricate Drive Chain every two weeks with an approved Lubricant such as Rotanium Power-Lube No. 91665, Chevron Pinion Grease MS or equivalent.

## REDUCTION GEAR UNIT

- (4) Lubricate\* the Upper Bearing lightly once a week using the Zerk Fitting, shown on Page 3, Reference No. 54. Except for the Upper Bearing, the Reduction Gear Unit has sufficient Lubricant for a seasons operation but should be checked every 30 days of operation. Replace Lubricant yearly using an E.P. 90 Gear Lube. The Drain Plug on Page 3, Reference No. 56 is provided for draining the Housing.

## CENTER POLE BEARING

- (5) The Center Pole Bearing requires Lubrication once a season. Add enough Lubricant\* to the Zerk Fitting on Page 3, Reference No. 55 to show slightly at the Seals.

## TOW BAR GUIDE ROLLERS

- (6) The Tow Bar Guide Rollers as shown on Page 5 Reference No's 4 & 5 are mounted on Oilite Bronze Bushings, Reference No's 10 & 20. The Oil in the Bushings is adequate for a seasons operation. However, at the

close of the season, these Bushings should be removed and inspected for wear. If they show excessive wear, they should be replaced with new Bushings; if not submerge in SAE 30 Motor Oil for a few hours before re-assembling.

## FRONT WHEEL SPINDLES

- (7) The Front Wheel Spindles should be Lubricated\* once a week using the Zerk Fittings shown on Page 6, Reference No. 12.

## CAR WHEEL BEARINGS

- (8) Referring to Page 7 & 8, Reference No. 16, for Models without Zerk Fittings.

When storing for the winter, or once a year, remove the Bearings from their sleeves, wash thoroughly with solvent and re-pack with Lubricant\*.

For Models with Zerk Fittings, Supplement Page 6A & 6B, Reference No. 8, add enough Lubricant\* once a year to show slightly at the Seals.

- (9) The following Parts should be oiled weekly with SAE 10W oil or equivalent.  
Steering Post Bearing Bracket, Page 5 Reference No. 11  
Steering Column, Page 5 Reference No. 13  
Oil Directly Below Steering Wheel, Page 5 Ref. No. 12  
Tow Bar Bushing, Page 5 Reference No. 18  
Emergency Brake (if equipped) Page 5 Reference No. 14  
Steering Slide Rod, Page 7 Reference No. 23  
Steering Tie Rod Bushing, Page 7 Reference No. 17  
Steering Gear Link, Page 7 Reference No. 28

## NOTES

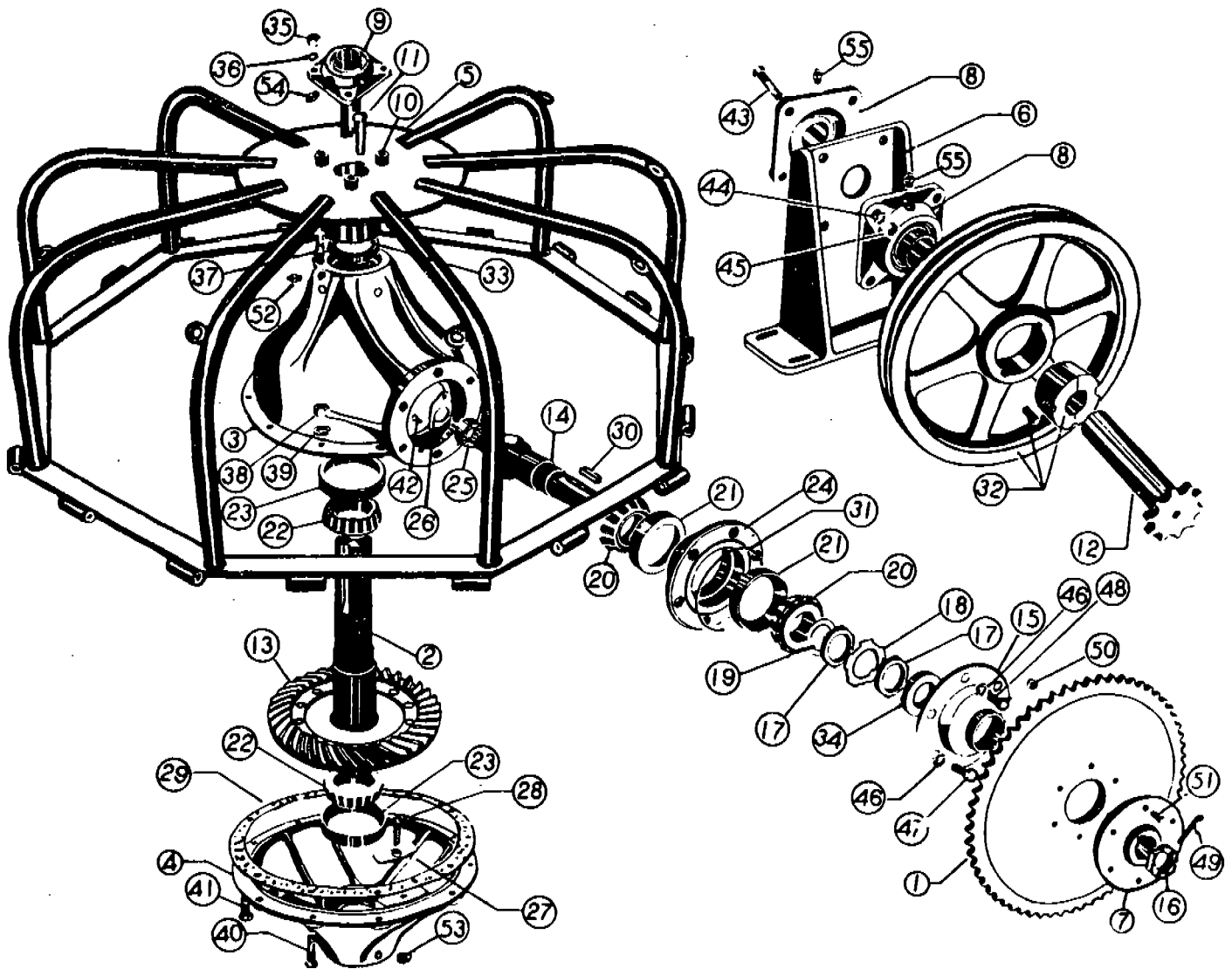
Keep Light Rings clean and free of contaminants such as grease, oil, etc.

\*Use a Multi-Purpose Water Resistant Grease with an accepted extreme pressure additive such as Chevron R. P. M. Molygrease No. 1 or Mobil Grease Special in all Pressure Fittings.



# MIDGE-O-RACER PARTS CATALOG

## REDUCTION GEAR & COUNTERSHAFT ASSEMBLIES







# MIDGE-O-RACER PARTS CATALOG

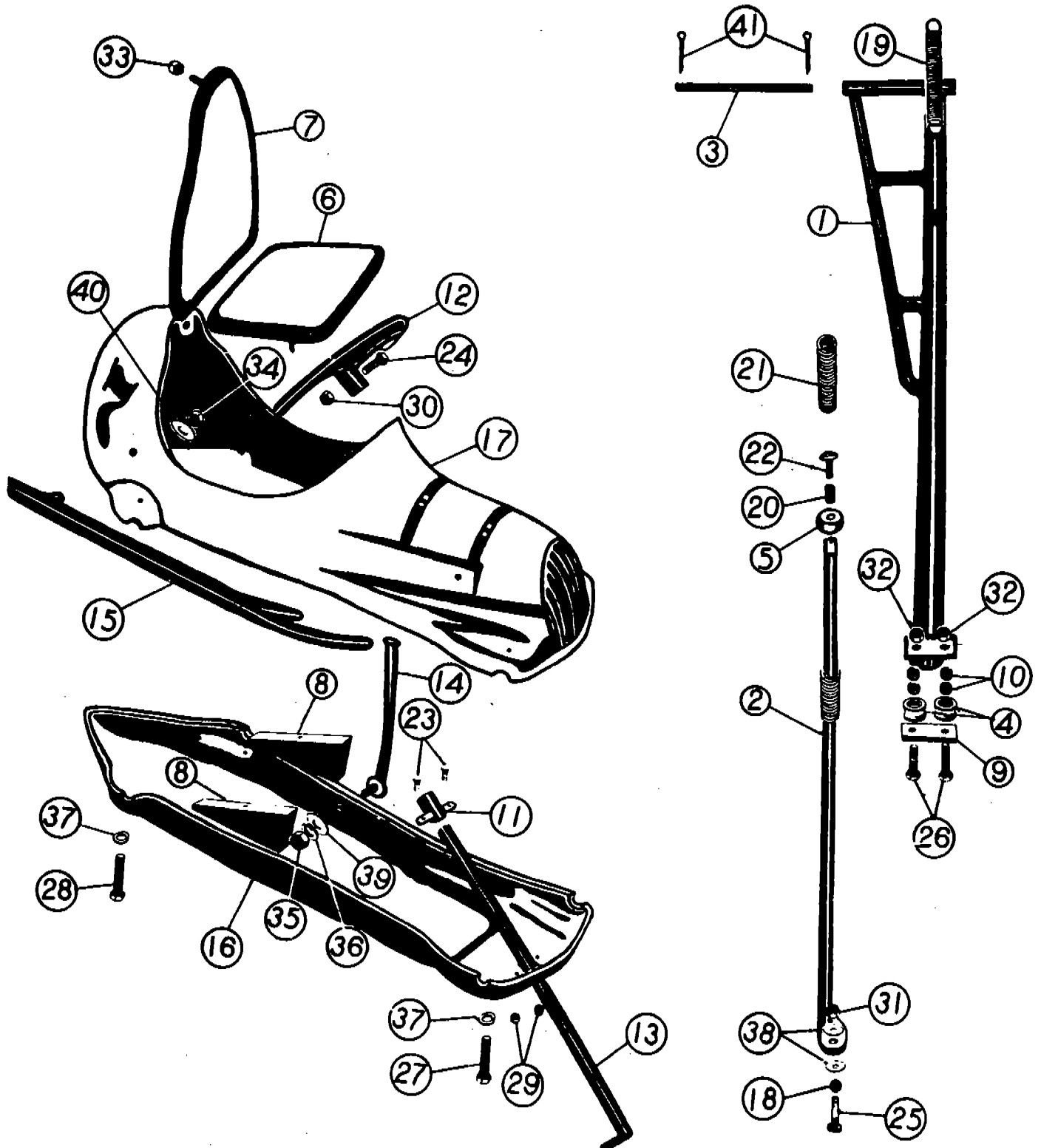
## REDUCTION GEAR & COUNTERSHAFT ASSEMBLIES

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	M-1	SPROCKET, Driven	1	29	MB-40	GASKET, Reduction gear housing	1
2	MB-4	SHAFT, Drive	1	30	MB-41	KEY, Drive pinion	1
3	MB-5	HOUSING, Reduction gear (upper)	1	31	MB-42	GASKET, Drive pinion bearing sleeve	1
4	MB-6	HOUSING, Reduction gear (lower)	1	32	MB-57	SHEAVE, Driven	1
5	M-8	HUB ASSEMBLY, Sweep	1	33	MB-76	OIL SEAL, Reduction gear housing	1
6	MB-10	BRACKET, Countershaft	1	34	MB-77	OIL SEAL, Drive pinion	1
7	MB-15	HUB, Sprocket	1	35		NUT, 1/2 in. S. A. E.	4
8	MB-16	BEARING, Countershaft	2	36		LOCKWASHER, 1/2 in.	4
9	MB-17	BEARING, Center pole	1	37		CAP SCREW, 1/2 in. X 2-1/2 in. S. A. E.	4
10	MB-18	SPACER, Center pole bearing	4	38		NUT, 7/16 in. S. A. E.	11
11	MB-19	KEY, Sweep hub	1	39		LOCKWASHER, 7/16 in.	11
12	M-21	SPROCKET, Countershaft	1	40		CAP SCREW, 7/16 in. X 1-3/4 in. S. A. E.	8
13	MB-24	GEAR, Ring	1	41		CAP SCREW, 7/16 in X 2 in. S. A. E.	3
14	MB-25	PINION, Drive	1	42		RIVET, 1/4 in. X 1-1/4 in. Rd. Hd.	2
15	MB-26	SUPPORT, Drive pinion grease retainer	1	43		CAP SCREW, 1/2 in. X 2-1/4 in. S. A. E.	4
16	MB-27	NUT, Drive pinion	1	44		LOCKWASHER, 1/2 in.	4
17	MB-28	NUT, Drive pinion bearing lock	2	45		NUT, 1/2 in. S. A. E.	4
18	MB-29	WASHER, Drive pinion bearing lock	1	46		LOCKWASHER, 9/16 in.	6
19	MB-30	WASHER, Drive pinion bearing thrust	1	47		CAP SCREW, 9/16 in. X 1-1/4 in. U. S. S.	3
20	MB-31	CONE, Drive pinion bearing	2	48		CAP SCREW, 9/16 in. X 1-3/4 in. U. S. S.	3
21	MB-32	CUP, Drive pinion bearing	2	49		COTTER PIN, 1/8 in. X 1-1/2 in.	1
22	MB-33	CONE, Ring gear bearing	2	50		NUT, 3/8 in. S. A. E. (lock)	6
23	MB-34	CUP, Ring gear bearing	2	51		CAP SCREW, 3/8 in. X 1-1/2 in. S. A. E.	6
24	MB-35	SLEEVE, Drive pinion bearing	1	52		ZERK FITTING, 1/8 (str.) upper bearing	1
25	MB-36	BEARING, Drive pinion pilot	1	53		DRAIN PLUG, Housing (1/2 in.)	1
26	MB-37	RETAINER, Drive pinion pilot bearing	1	54		ZERK FITTING, Center pole bearing	1
27	MB-38	BLOCK, Ring gear thrust	1	55		ZERK FITTING, Countershaft bearing	2
28	MB-39	PIN, Ring gear thrust block	1				



## MIDGE-O-RACER PARTS CATALOG

### CAR & SWEEP ASSEMBLIES





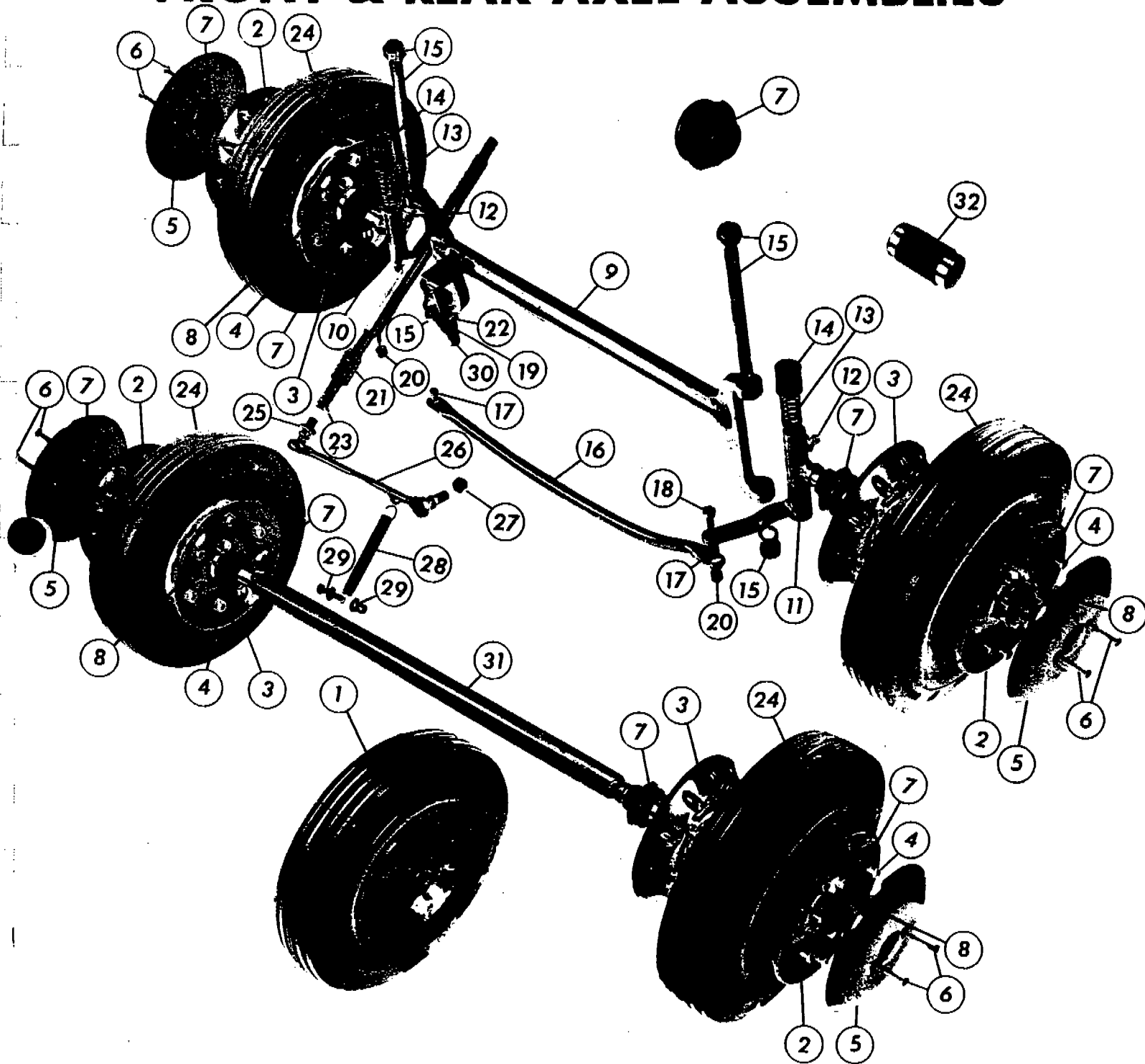
# MIDGE-O-RACER PARTS CATALOG

## CAR & SWEEP ASSEMBLIES

NO.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.	NO.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1		M-4	SWEEP	9	22		M-71	SCREW, Tow Bar Guide Roller (Inner)	9
2		M-5	TOW BAR ASSEMBLY	9	23			CAP SCREW, 1/4" x 3/4" S. A. E.	18
3		M-7	PIN, Sweep	9	24			CAP SCREW, 5/16" x 1-1/2" S. A. E.	9
4		M-18	ROLLER, Tow Bar Guide (Outer)	18	25			CAP SCREW, 5/16" x 1-1/2" S. A. E.	9
5		M-19	ROLLER, Tow Bar Guide (Inner)	9	26			CAP SCREW, 5/16" x 1-3/4" S. A. E.	18
6		M-24	SEAT, Car	9	27			CAP SCREW, 3/8" x 4" U. S. Std	18
7		M-25	SEAT, Back	9	28			CAP SCREW, 3/8" x 4-1/2" U. S. Std	18
8		M-26	SUPPORT, Car Seat	18	29			NUT, 1/4" S. A. E. (lock)	18
9		M-27	PLATE, Tow Bar Guide Roller	9	30			NUT, 5/16" S. A. E.	9
10		M-28	BUSHING, Tow Bar Guide Roller (Outer)	36	31			NUT, 5/16" S. A. E.	9
11		M-43	BRACKET, Steering Post Bearing	9	32			NUT, 5/16" S. A. E.	18
12		M-44	WHEEL, Steering	9	33			NUT, 5/16" U. S. Std.	9
13		M-47	COLUMN, Steering	9	34			NUT, 3/8" S. A. E. (lock)	9
14		M-48	LEVER, Emergency Brake	9	35			NUT, 3/8" S. A. E. (lock)	9
15		M-53	EXHAUST PIPE	9	36			LOCKWASHER, 3/8"	9
16		M-56	CAR, Lower Casting	9	37			LOCKWASHER, 3/8"	36
17		M-57	CAR, Upper Casting	9	38			WASHER, 5/16"	18
18		M-59	BUSHING, Tow Bar	9	39			WASHER, 3/8"	18
19		M-60	SPRING, Sweep	9	40			WASHER, 3/8"	9
20		M-69	BUSHING, Tow Bar Guide Roller (Inner)	9	41			COTTER KEY, 1/8" x 1-1/4"	18
21		M-70	SPRING, Tow Bar	9					



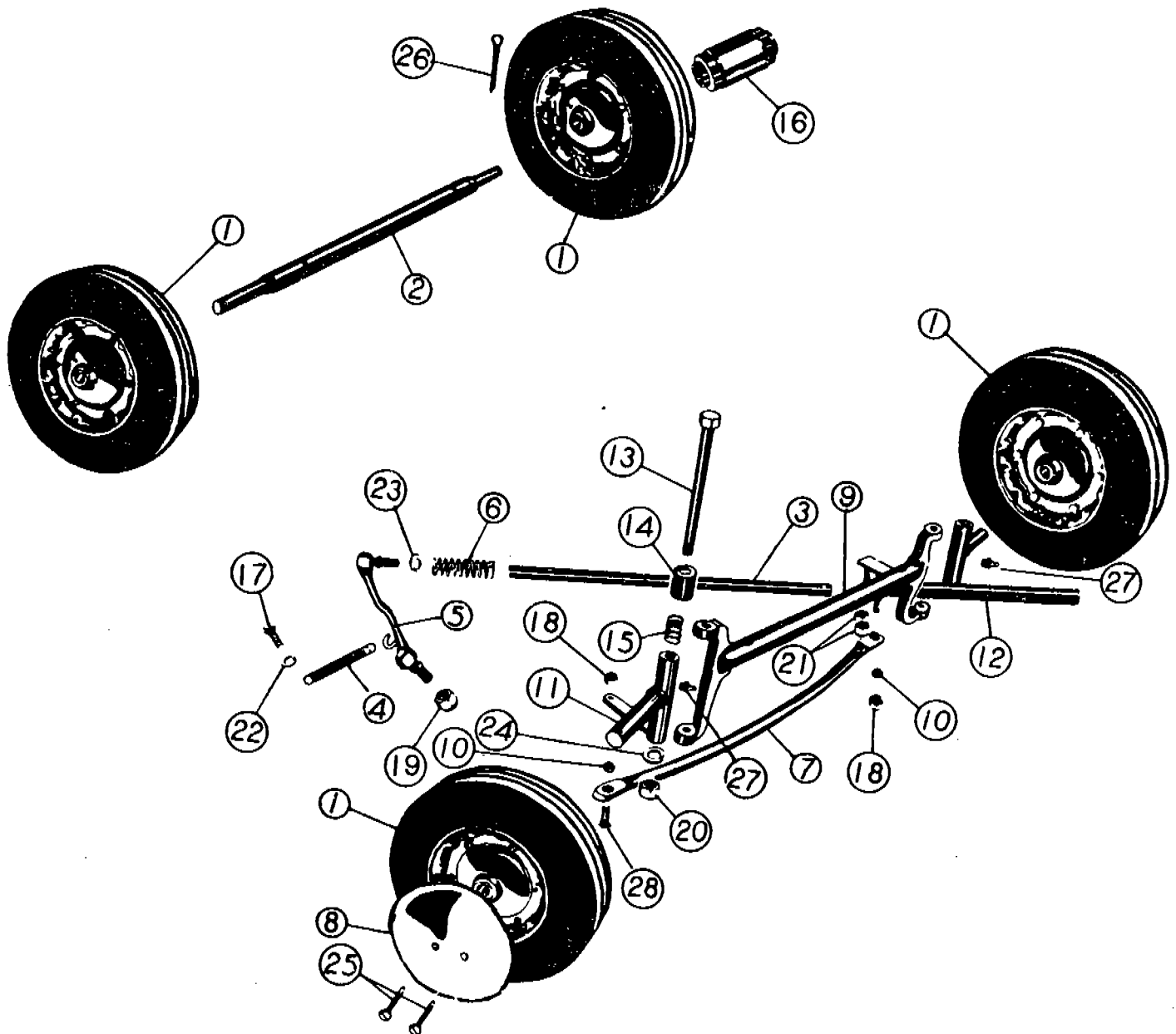
# FRONT & REAR AXLE ASSEMBLIES





## MIDGE-O-RACER PARTS CATALOG

### FRONT & REAR AXLE ASSEMBLY





## MIDGE-O-RACER PARTS CATALOG

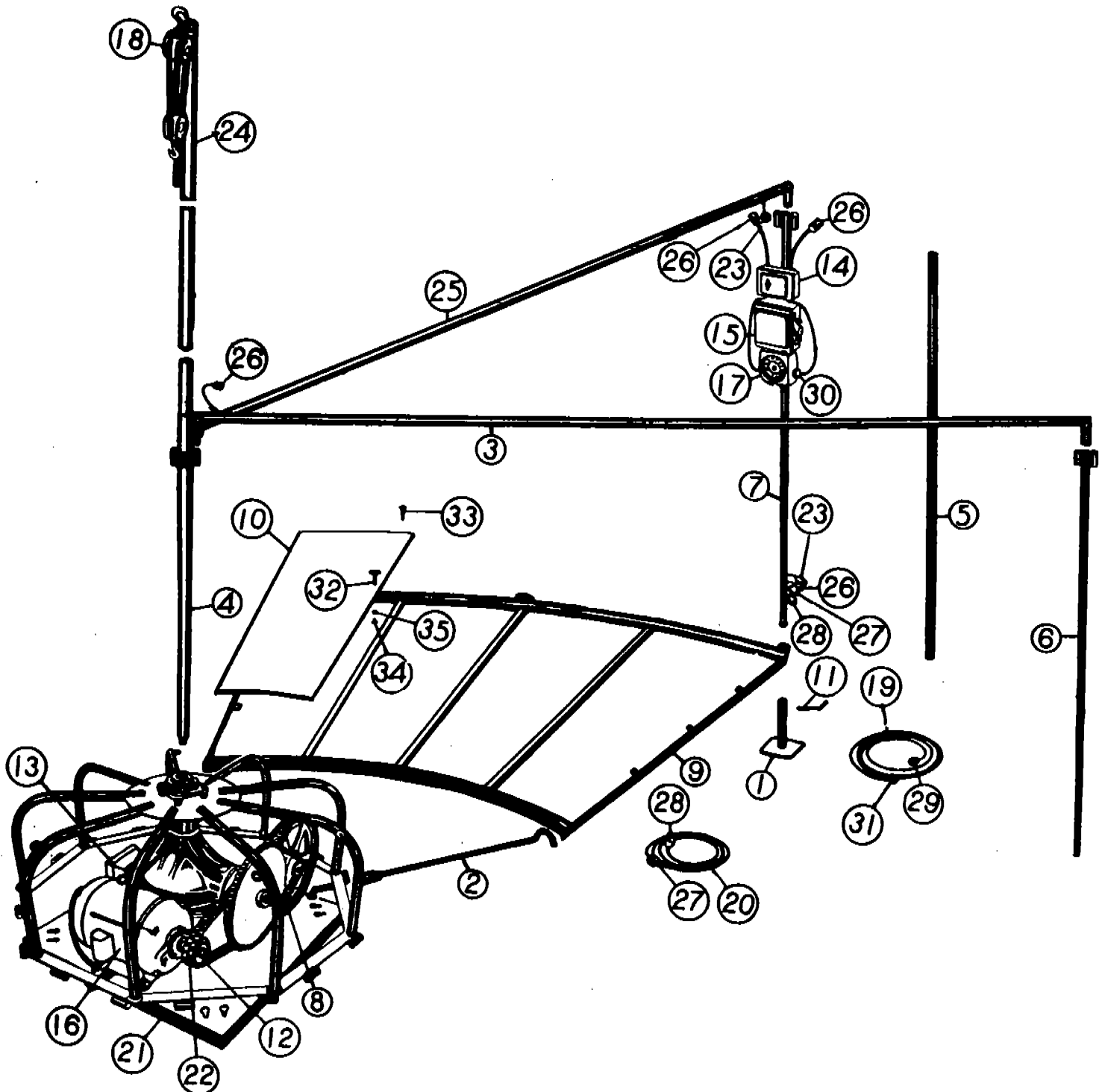
### FRONT & REAR AXLE ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	M-7	WHEEL, Car	36	15	M-68	SPRING, Front axle	18
2	M-45	AXLE, Rear	9	16	M-72	BEARING, Wheel	36
3	M-46	ROD, Steering slide	9	17		CAP SCREW, 1/4" x 3/4" S. A. E.	9
4	M-49	SPRING, Steering gear	9	18		NUT, 5/16" S. A. E. (lock)	18
5	M-50	LINK, Steering gear	9	19		NUT, 7/16" S. A. E. (lock)	9
6	M-51	SPRING, Steering slide rod	9	20		NUT, 1/2" S. A. E.	18
7	M-52	TIE BAR, Steering	9	21		NUT, 3/8" S. A. E.	18
8	M-54	HUB CAP	36	22		LOCKWASHER, 1/4"	9
9	M-55	AXLE, Front	9	23		LOCKWASHER, 7/16"	9
10	M-58	BUSHING, Steering tie rod	18	24		LOCKWASHER, 1/2"	18
11	M-64	SPINDLE, Front axle (R. H.)	9	25		METAL SCREW, No. 10 x 1-1/2"	72
12	M-65	SPINDLE, Front axle (L. H.)	9	26		COTTERKEY, 5/32" x 1-1/2"	36
13	M-66	KING PIN, Front axle	18	27		ZERK FITTING, 1/8" (Straight)	18
14	M-67	DUST CAP, Front axle spindle	18	28		CAP SCREW, 5/16" x 1" S. A. E.	9



## MIDGE-O-RACER PARTS CATALOG

### MISCELLANEOUS ASSEMBLY





# MIDGE-O-RACER PARTS CATALOG

## MISCELLANEOUS ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	M-2	JACK, Platform	16	*	M-73	PLATFORM SECTION ASSEMBLY	6
2	M-3	TIE ROD, Platform	8	22	M-74	"V" BELT	2
3	MB-9	ROD, Radial	7	23	MB-83	PLUG, 110 V. Input to switch & Radial Rod Input	2
4	MB-11	POLE, Lower Center	1	24	MB-92	POLE, Upper Center	1
5	M-12	POST, Top Intermediate	8	25	MB-93	RADIAL ROD ASSEMBLY (With electrical fittings)	1
6	M-13	POST, Outer Top	8	*	MB-94	MOTOR (3-phase)	1
7	M-14	POST, Control	1	26	MB-102	CONNECTOR BODY, Radial Rod Output & 110 V. Output	4
	M-22	ROLLER CHAIN	1	27	MB-103	PLUG, Power Cord & Power Input (single phase)	2
*	M-23	SWEEP CANVAS	1	28	MB-104	CONNECTOR BODY, Power Cord & Power Output Single phase	2
9	M-38	FRAME, Platform Section	8	*	MB-105	PLUG, Power Cord & Power Input (3-phase)	2
10	M-39	PLYWOOD PLATFORM SECTION	32	*	MB-106	CONNECTOR BODY, Power Cord & Power Output (3-phase)	2
11	M-41	PIN, Jack	16	29	MB-107	CONNECTOR BODY, Holding Coil Cord & 110 V. input to Timer Switch	2
12	M-42	SHEAVE, Drive	1	30	MB-108	PLUG, 110 V. Output from Timer Switch	1
13	MB-44	SWITCH, Magnetic	1	31	MB-109	PLUG, Holding Coil	1
14	MB-45	SWITCH, Disconnect (lights)	1	32		ELEVATOR BOLT, 5/16" X 1-1/2"	120
*	MB-46	SWITCH, Light Toggle	1	33		CARRIAGE BOLT, 5/16" X 1-1/2"	160
*	MB-47	FUSE, Light Disconnect Switch	2	34		NUT, 5/16" U.S. Std.	280
15	MB-48	SWITCH, Disconnect (Power)	1	35		LOCKWASHER, 5/16"	280
*	MB-49	FUSE, Power Disconnect Switch	2	*		CAP SCREW, 1/2" X 1-1/2" S. A. E. (Countershaft)	4
16	MB-50	MOTOR, (Single Phase)	1	*		WASHER, 1/2" Flat (Countershaft)	4
17	MB-53	SWITCH, Timer	1	*		LOCKWASHER, 1/2" (Countershaft)	4
*	MB-54	TOP	1	*		NUT, 1/2" S. A. E. (Countershaft)	4
*	MB-55	SIDE WALL	1	*		CAP SCREW, 3/8" X 1" S. A. E. (Motor to motor plate)	4
18	MB-58	ROPE BLOCK, Top	1	*		LOCKWASHER, 3/8" (Motor to Motor Plate)	4
	MB-60	CORD ASSEMBLY, Holding coil	1	*		NUT, 3/8" (Motor to Motor Plate)	4
	MB-61	CORD ASSEMBLY, Power	1	*		CAP SCREW, 3/8" X 1-1/4" S. A. E. (Motor to motor plate)	4
*	MB-70	BRACE, Countershaft Bracket	1	*		LOCKWASHER, 3/8" (Motor Plate to Base)	4
21	MB-71	BASE, Power Unit	1	*		NUT, 3/8" S. A. E. (Motor plate to Base)	4
*	MB-72	CLAMP, Motor Hold Down	4				

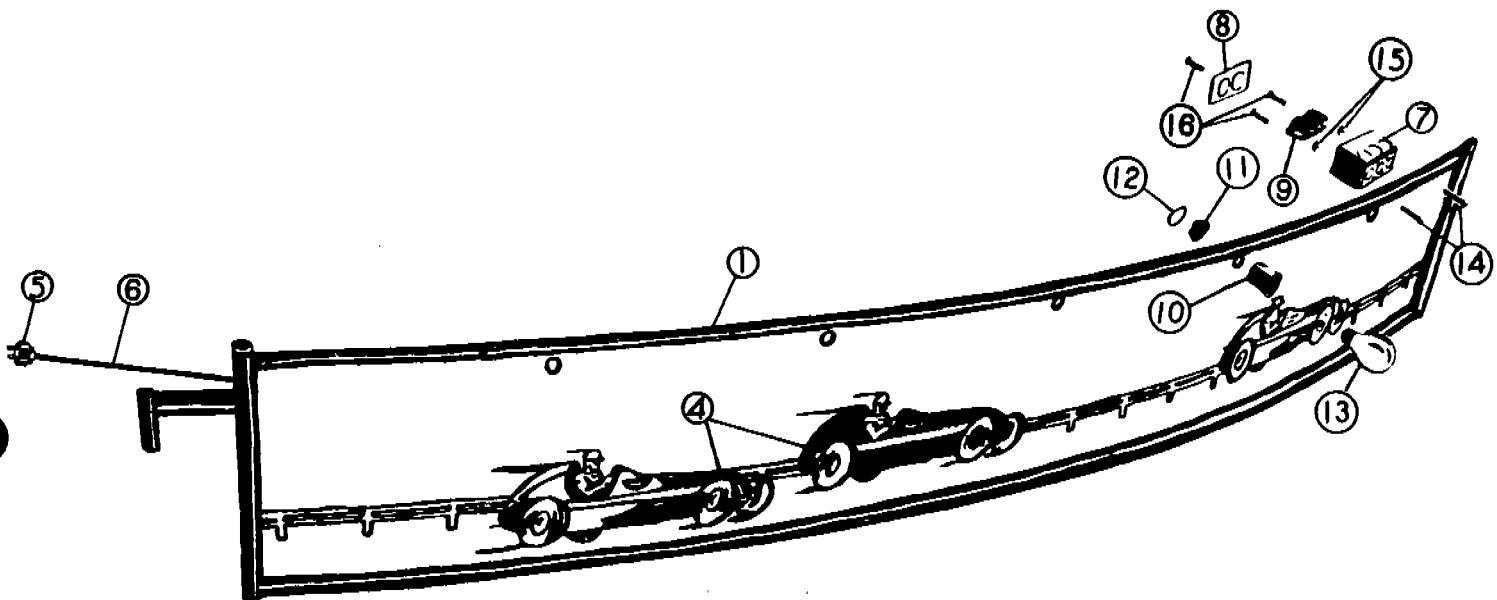
\* Not illustrated





# MIDGE-O-RACER PARTS CATALOG

## CRESTING ASSEMBLY



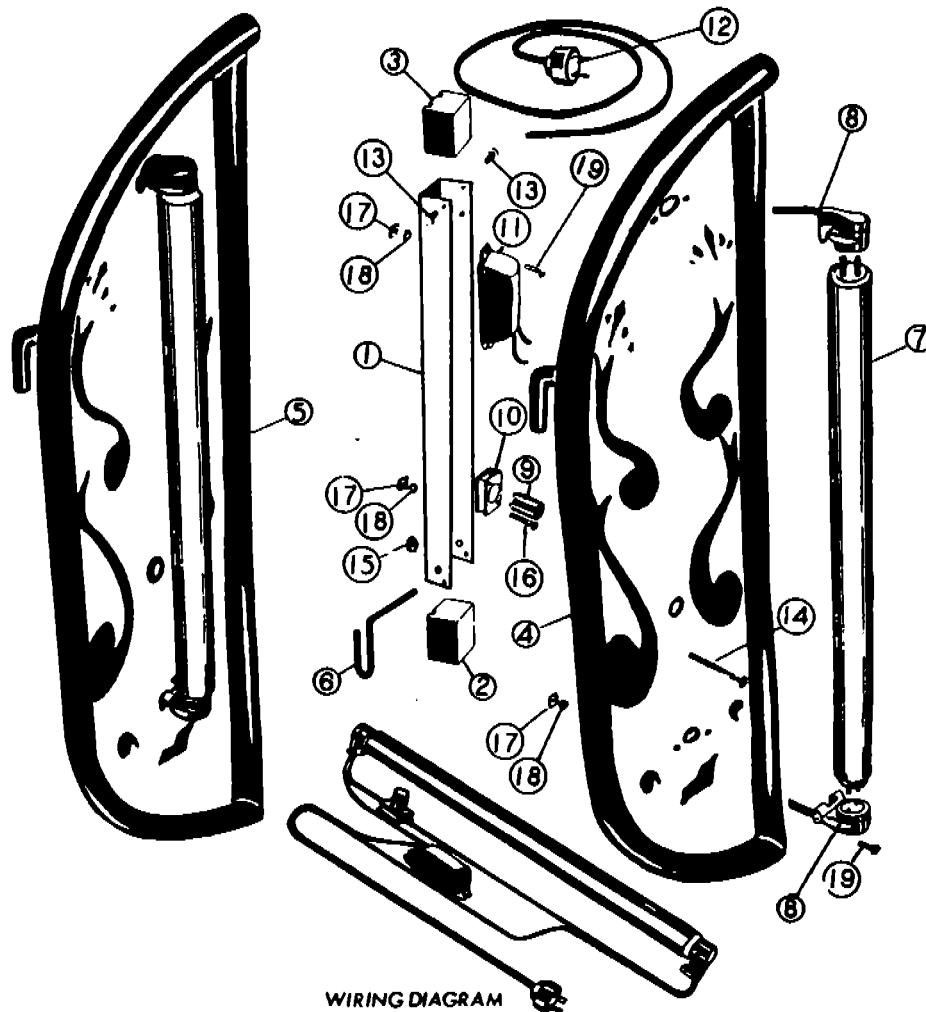
REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	M-40	CRESTING	8	9	MB-87	RECEPTACLE, Cresting light	8
*	M-61	CRESTING ASSEMBLY (plain)	7	10	MB-88	SOCKET, Cresting lamp	40
*	M-62	CRESTING ASSEMBLY (sign)	1	11	MB-89	CAP, Cresting lamp socket	40
4	M-63	DECAL	23	12	MB-90	RING, Cresting lamp socket snap	40
5	MB-83	CAP, Cresting light	8	13	MB-91	LAMP, Cresting	40
6	MB-84	CORD, Cresting light	8	14		MACHINE SCREW, 8-32 X 3/4" Rd. Hd. (brass)	16
7	MB-85	BOX, Outlet	8	15		NUT, 8-32 (brass)	16
8	MB-86	COVER, Outlet box	8	16		MACHINE SCREW, 6-32 X 1/2" Flat Hd.	24

\* Not illustrated



## MIDGE-O-RACER PARTS CATALOG

### MEDALLION ASSEMBLY

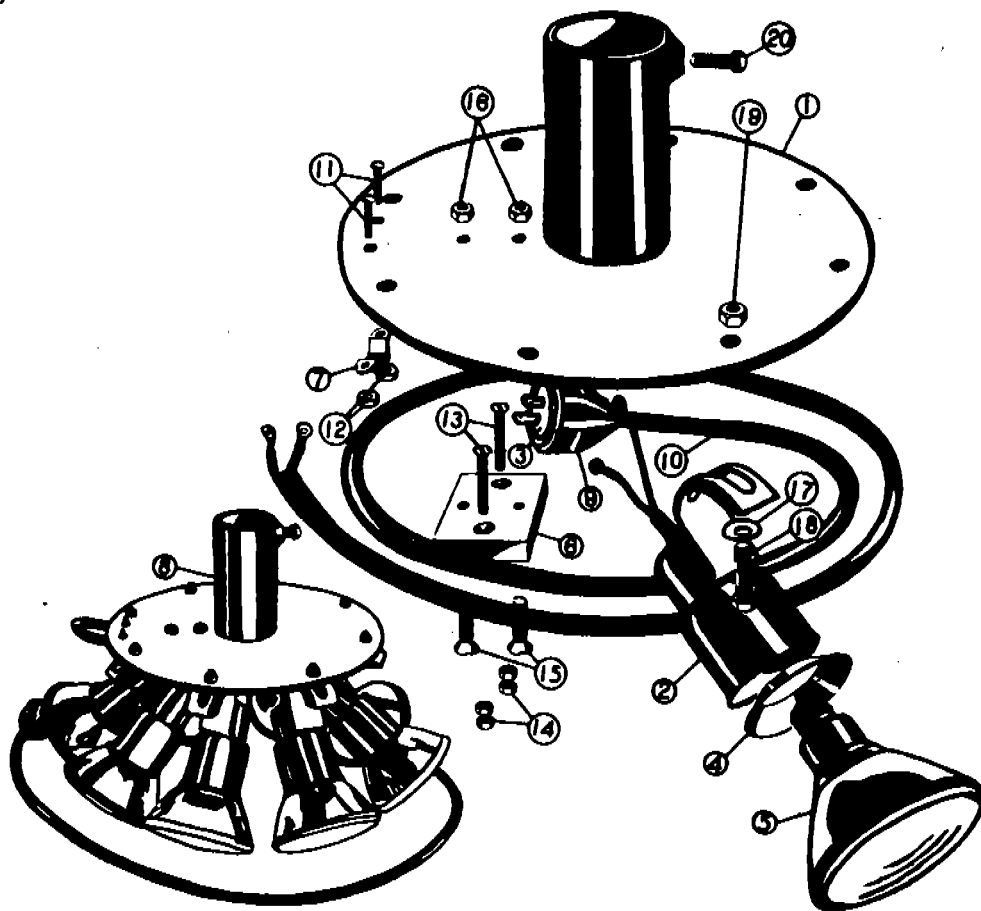


REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	MB-63	BOX, Medallion Fluorescent Light Fixture	8	11	MB-82	BALLAST, Medallion Fluorescent	8
2	MB-64	BOX END, (Lower) Medallion Fluorescent Fixture	8	12	MB-83	CAP, Medallion Light	8
3	MB-65	BOX END, (Upper) Medallion Fluorescent Fixture	8	13		METAL SCREW, No. 7 x 1/2"	32
4	MB-67	MEDALLION	8	14		MACHINE SCREW, 8-32 x 1-3/4" Rd. Hd. (Brass)	16
5	MB-68	MEDALLION ASSEMBLY	8	15		NUT, 8-32 (Brass)	16
6	MB-69	LOCK, Medallion	8	16		MACHINE SCREW, 6-32 x 3/4" (Brass)	16
7	MB-78	TUBE, Medallion Fluorescent	8	17		NUT, 6-32 (Brass)	64
8	MB-79	SOCKET, Medallion Fluorescent Tube	16	18		LOCKWASHER, 1/8"	64
9	MB-80	STARTER, Medallion Fluorescent	8	19		MACHINE SCREW, 6-32 x 1/2"	48



# MIDGE-O-RACER PARTS CATALOG

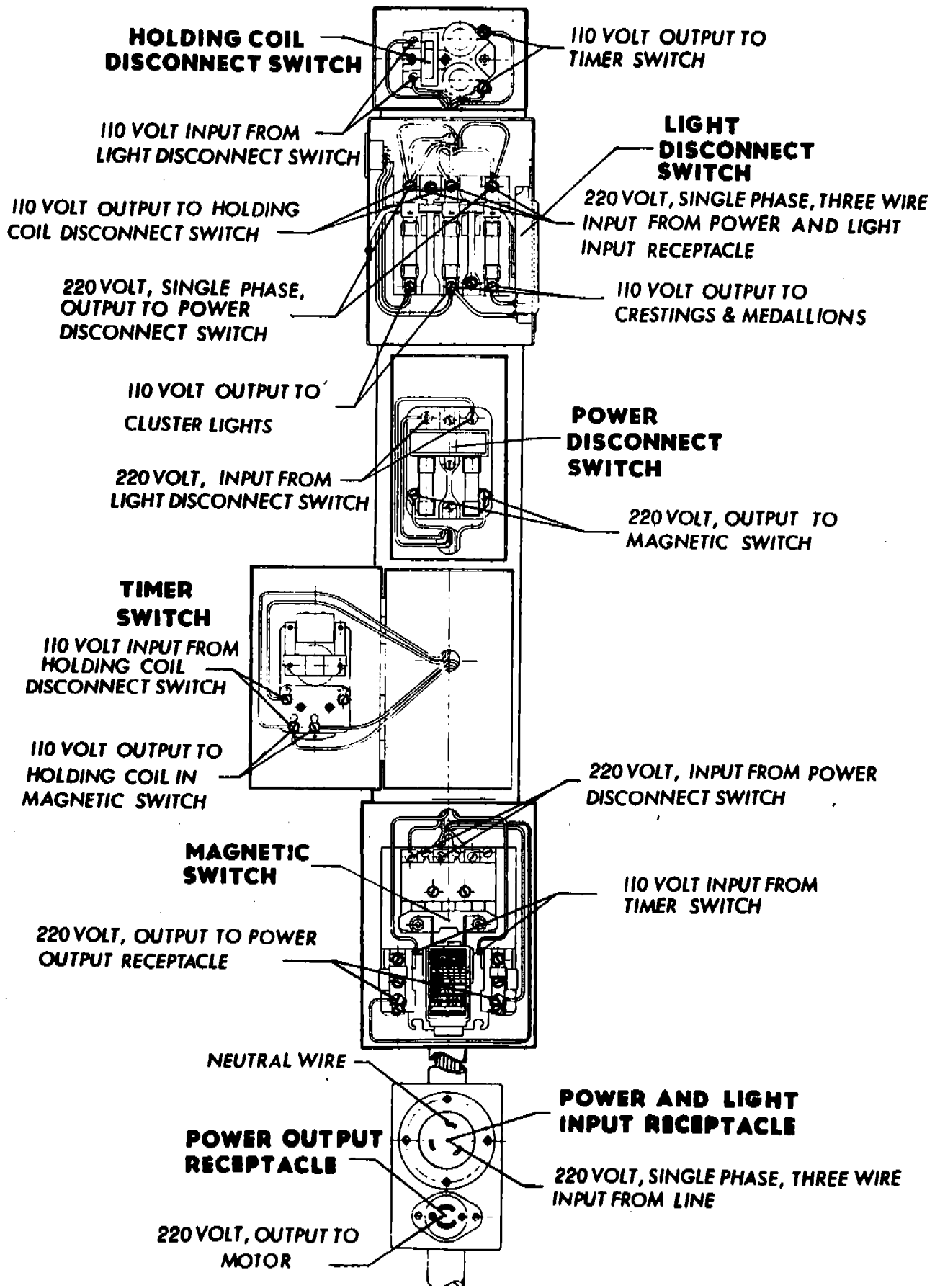
## CLUSTER LIGHT ASSEMBLY



REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	MB-20	FLANGE, Light Cluster	1	11		MACHINE SCREW, 6-32 x 3/4 (Rd Hd. Brass)	2
2	MB-55	LAMPHOLDER, Cluster Light	8	12		NUT, 6-32	2
3	MB-83	CAP, Cluster Light	1	13		MACH. SCREW, 8-32 x 1-1/2 (Flat Hd. Brass)	2
4	MB-95	GASKET, Cluster Light Lampholder	8	14		NUT, 8-32	4
5	MB-96	LAMP, Cluster Light	8	15		MACH. SCREW, 10-32 x 1" (Flat Hd. Brass)	2
6	MB-97	BLOCK, Terminal	1	16		NUT, 10-32	2
7	MB-98	CLAMP, Cord	1	17		WASHER, 1/4" Flat	8
8	MB-99	ASSEMBLY, Cluster Light	1	18		CAP SCREW, 1/4"x 3/4" SAE	8
9	MB-100	COVER, Cluster Light Cap (Rubber)	1	19		NUT, 1/4" SAE	8
10	MB-101	CORD, Cluster Light	1	20		CAP SCREW, 3/8"x 1/4" U.S. Std.	1

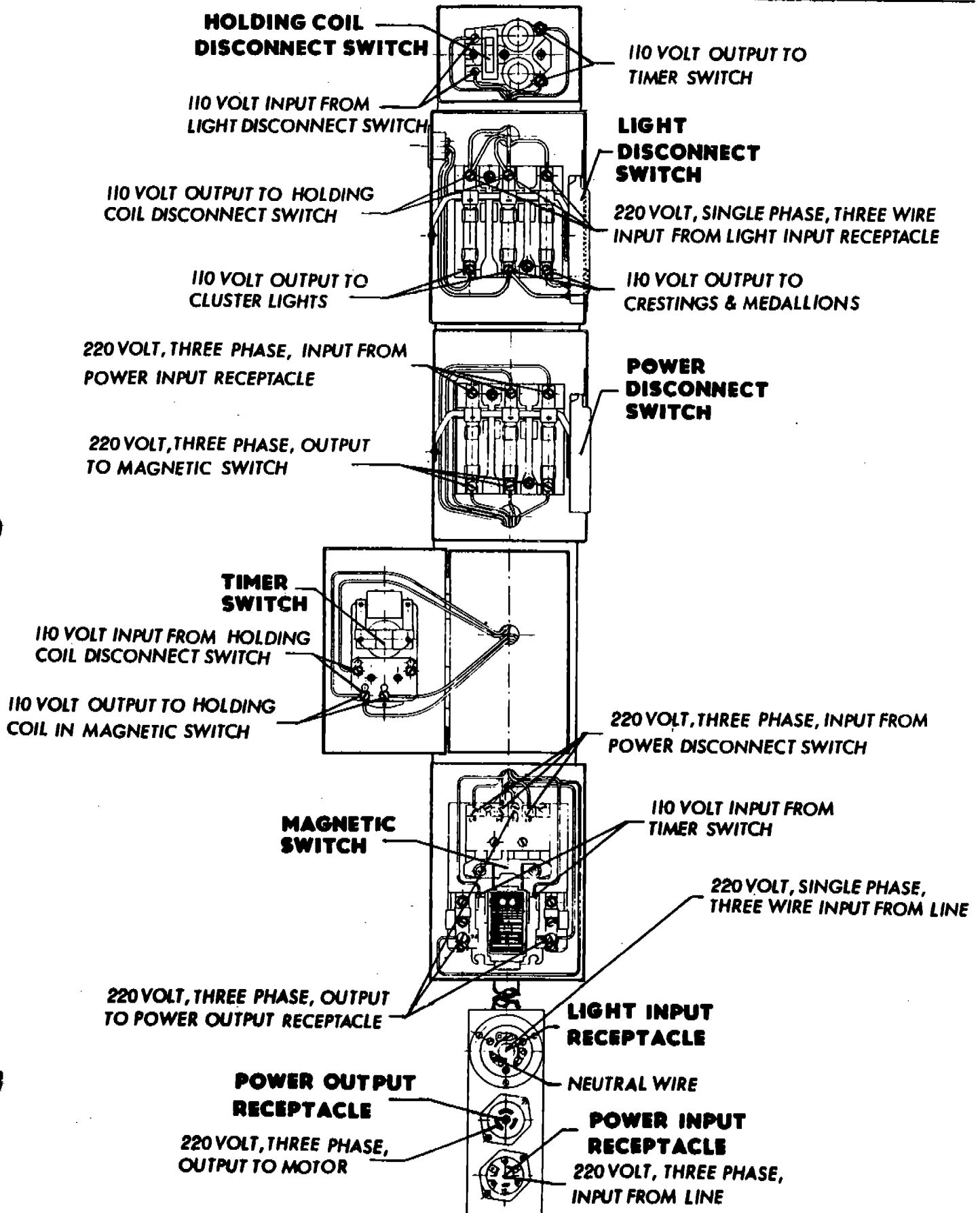


# WIRING DIAGRAM for MIDGE-O-RACER with SINGLE PHASE MOTOR





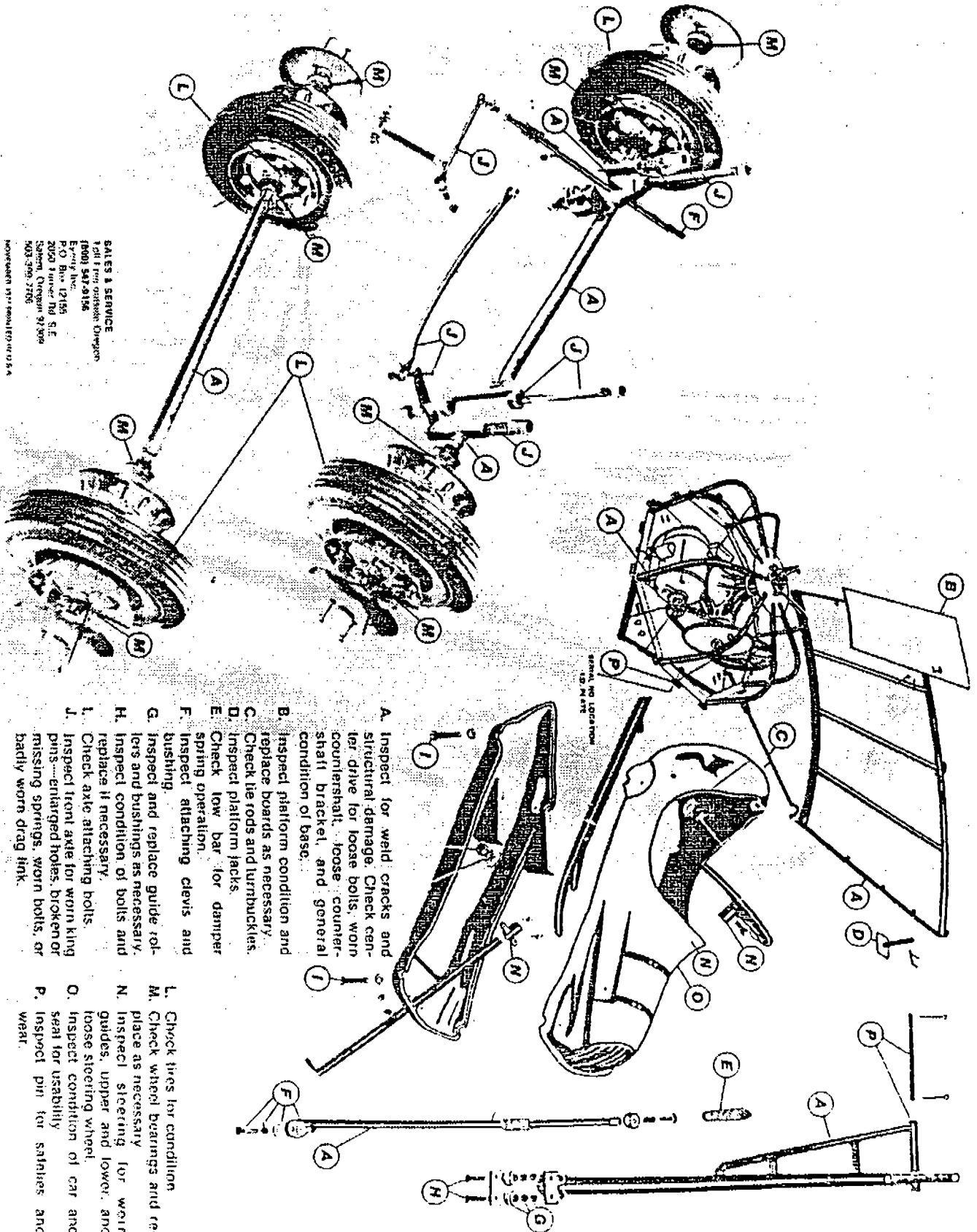
# WIRING DIAGRAM for MIDGE-O-RACER with THREE PHASE MOTOR





# MIDGE-O-RACER

## INSPECTION CHECK LIST



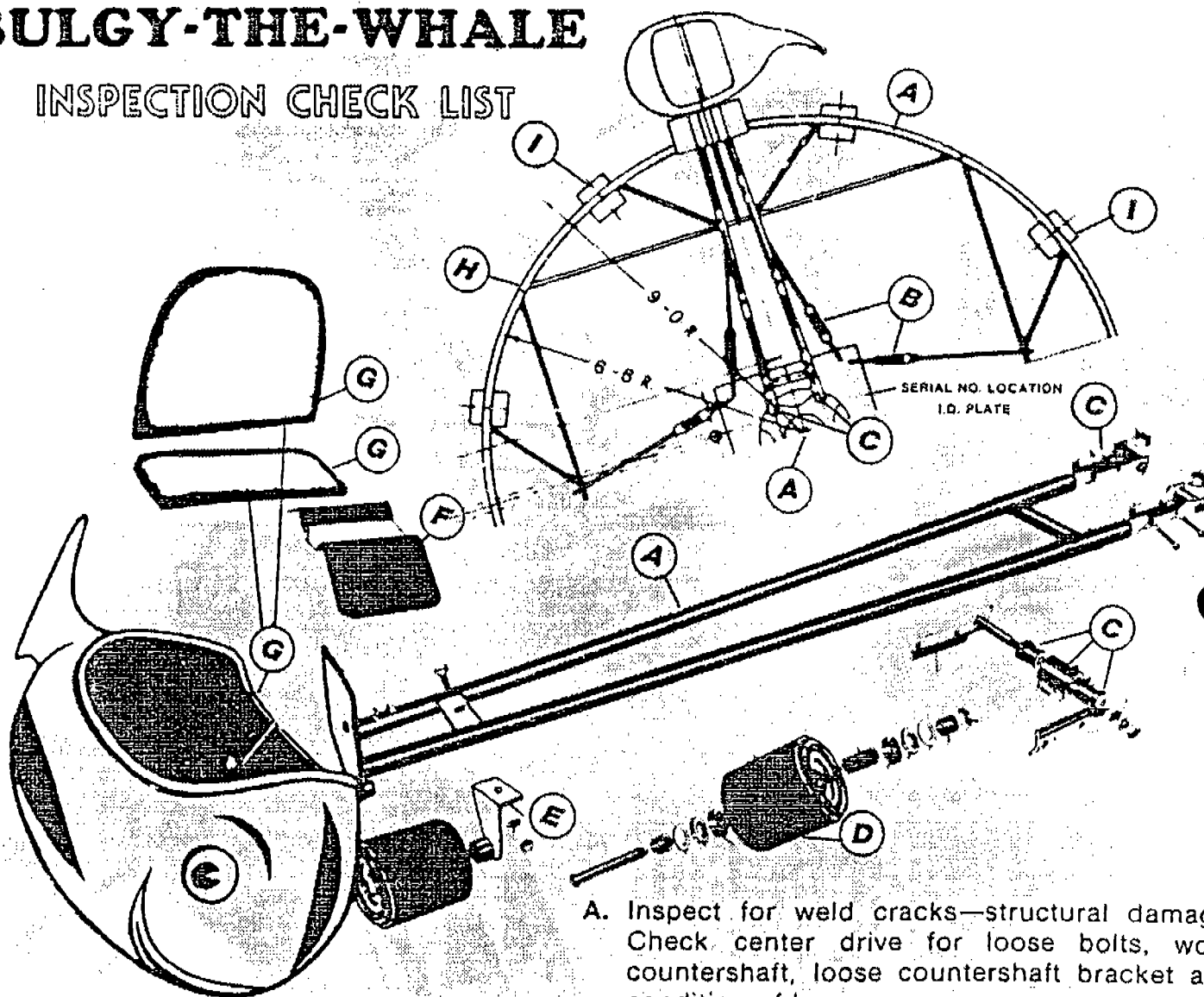
SALES & SERVICE  
1011 1/2 Hwy. 100, 1000  
Everly, Mo. 64741-1000  
P.O. Box 12155  
2020 Tanager Rd. S.E.  
Salem, Oregon 97306  
503-395-2788  
Horsehead 357-5500 (EPA 12.5A)

- A. Inspect for weld cracks and structural damage. Check center drive for loose bolts, worn countershaft, loose countershaft bracket, and general condition of base.
- B. Inspect platform condition and replace boards as necessary.
- C. Check tie rods and turnbuckles.
- D. Inspect platform jacks.
- E. Check tow bar for damper spring operation.
- F. Inspect attaching clevis and bushing.
- G. Inspect and replace guide rollers and bushings as necessary.
- H. Inspect condition of bolts and replace if necessary.
- I. Check axle attaching bolts.
- J. Inspect front axle for worn king pins—enlarged holes, broken or missing springs, worn bolts, or badly worn drag link.
- K. Check tires for condition.
- L. Check wheel bearings and replace as necessary.
- M. Inspect steering for worn guides, upper and lower, and loose steering wheel.
- N. Inspect condition of car and seal for usability.
- O. Inspect pin for safety and wear.



# BULGY-THE-WHALE

## INSPECTION CHECK LIST

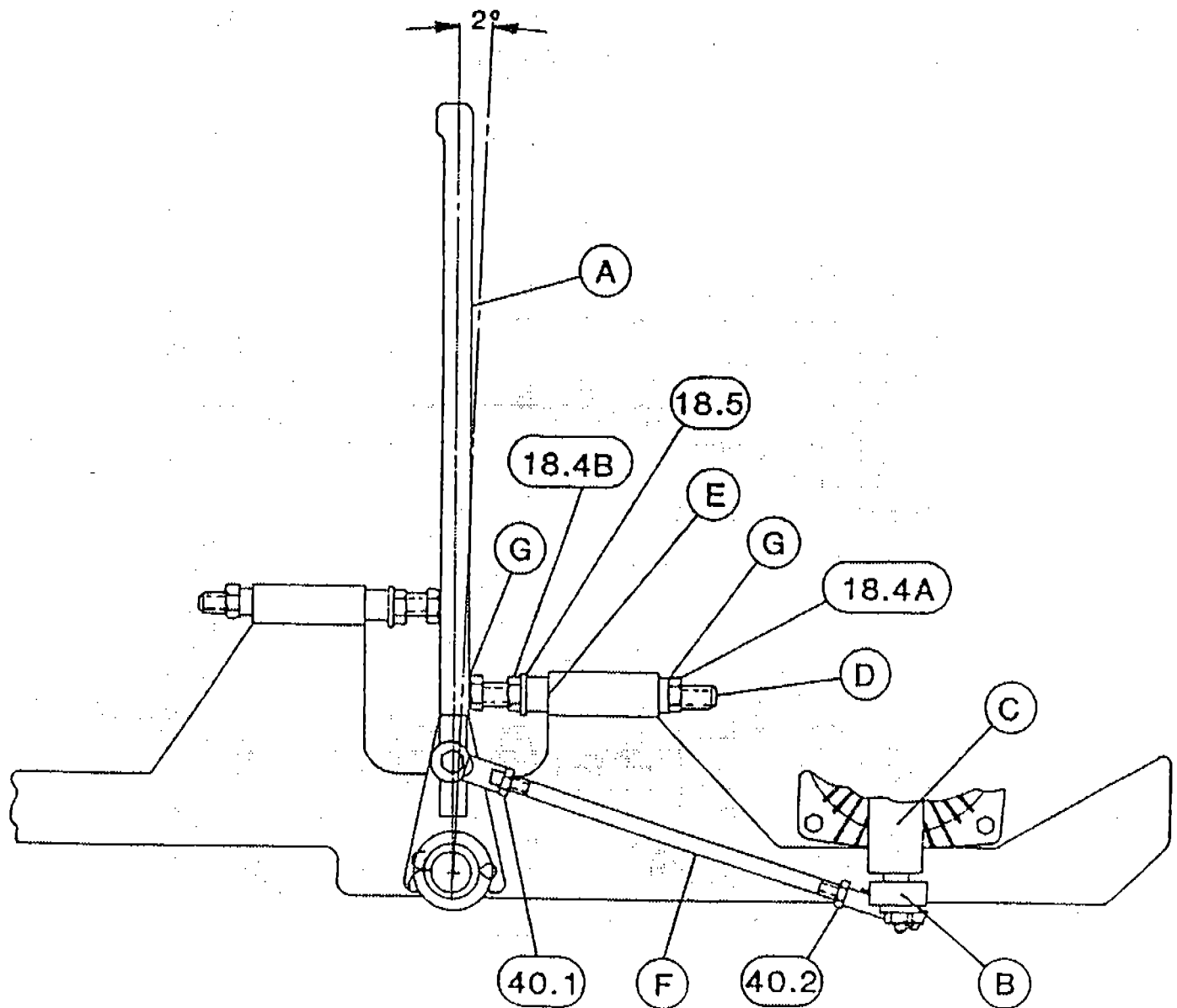


- A. Inspect for weld cracks—structural damage. Check center drive for loose bolts, worn countershaft, loose countershaft bracket and condition of base.
- B. Check condition of tie rods and turnbuckles.
- C. Inspect hinge—replace bushings if worn. Nut is special with machined beveled surface which contacts hinge. Inspect joint and replace if necessary with factory parts (See bulletin B-1).
- D. Inspect condition of roller and bearings—service if necessary.
- E. Check roller mounting bracket.
- F. Check for guard and condition.
- G. Check car for fractures, poor upholstery, inferior boards, etc.
- H. Check condition of attaching bolt and for hole enlargement—replace and repair as needed.
- I. Inspect jacks for condition.

Sweep Extension: if used check general condition

SALES & SERVICE  
Toll Free outside Oregon  
(800) 547-9156  
Eyerly Inc.  
P.O. Box 12155  
2050 Turner Rd. S.E.  
Salem, Oregon 97309  
503-299-7706

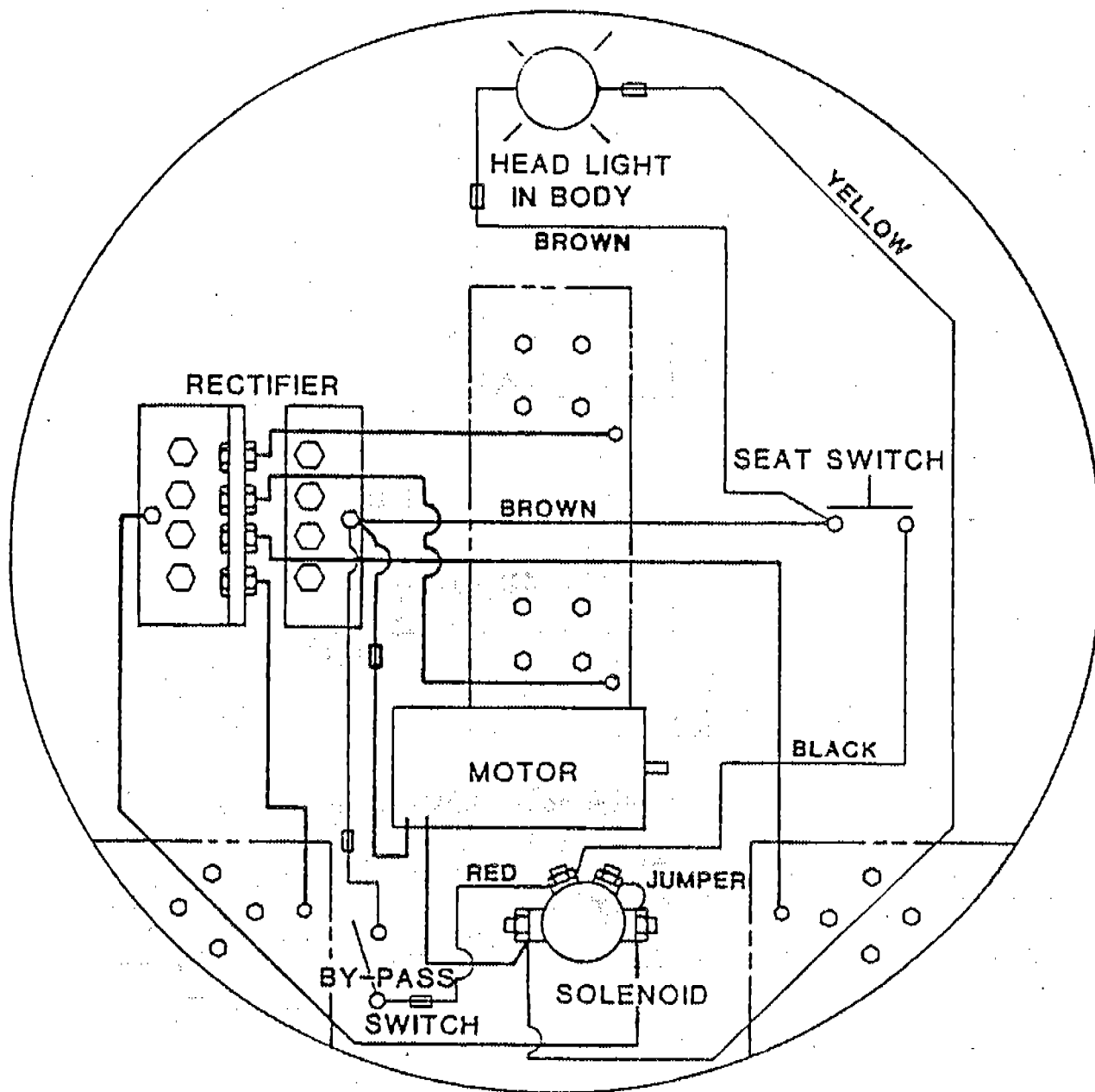
# ADJUSTING THE STEERING LEVERS AND HYDROSTATIC TRANSMISSIONS








# CAR ELECTRICAL WIRING DIAGRAM

12



## KEY

-  #6 WELDING CABLE
-  14 GAUGE STRANDED WIRE
-  CRIMP ON WIRE CONNECTOR

# ELECTRICAL TROUBLE SHOOTING

This section assumes power to the floor is on, of proper voltage, and proper current capacity.

## Car Runs Erratically:

A, B, C, I, J

## Car Will Not Run In Any Position:

A, B, C, D, E, F, G, K

## Fuse Blowing, Immediate & Consistent:

C

## Car Runs Backwards:

H

- A. Check fuse
- B. Check power to top of fuse
- C. Check Diodes
- D. Check power out of rectifier
- E. Turn on seat by-pass switch
- F. Check by-pass solenoid
- G. Check power at motor leads
- H. Reverse motor leads
- I. Check slipper contacts, clean slippers to bare metal.
- J. Check car deck, clean thoroughly
- K. Check motor

# TROUBLE SHOOTING THE CAR

## CAUSES AND CORRECTIONS

### Excessive Tube Punctures:

1. Under pressurization. — Inflate to 5 to 6 PSI
2. Improperly installed tube. — Readjust as required for proper seating.
3. Foreign projection punctures. — Check ride bumpers and perimeter bumpers for protrusions and correct.

### Car Pulls To One Side:

1. Unequal actuation of hydrostatic transmission. — Adjust control rod for equal throw.
2. Low oil level in hydrostatic transmission. — Fill transmission hydrostatic to proper level and check for leaks.
3. Steering lever out of adjustment. — Match adjust steering levels to an upright position set to incline about 2° from operator.
4. Broken chain. — Repair or replace with new chain and lubricate.
5. Loose or broken drive sheave. — Tighten or replace with new drive sheave.
6. Loose or broken drive belt. — Tighten or replace with new drive belt.

### Motor Runs, Steering Levers Engaged, Car Does Not Drive:

1. Hydrostatic transmission in neutral mode. — Adjust steering levers to upright position inclining 2° from car operator.
2. Broken motor drive belt. — Replace belt.
3. Oil low in hydrostatic transmission. — Fill to proper level and check for leaks.
4. Steering levers out of adjustment. — Adjust steering levers to upright position inclining 2° from car operator.