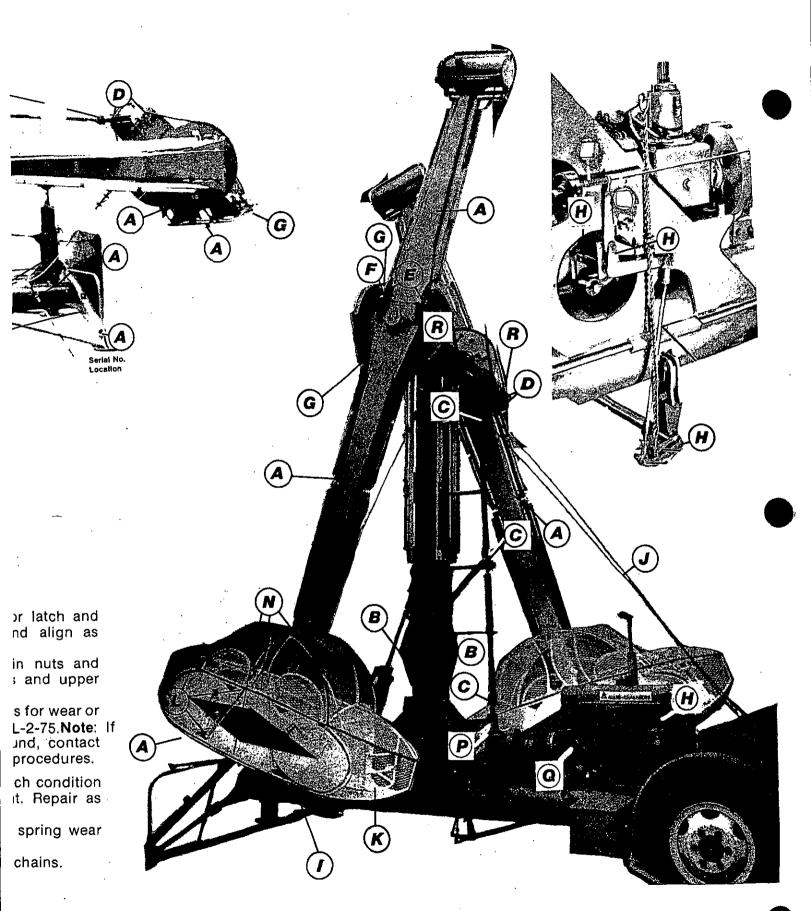


- A. Inspect weld area for cracks and structural damage.
- B. Check condition of hinge pin and clamping bolt.
- C. Gas model, check condition of universal and mounting bearings.
- D. Check rear end for loose pinion nuts. or sprockets.
- E. Check bolts for condition.
- F. Check bushing for wear; 1" movement at car indicated .060 maximum wear in bushing—end play not to exceed .030.
- G. Check condition of sign hinge.
- H. Inspect wear areas of linkage.
- I. Inspect attaching bolts and pins.
- J. Guy cables are to be equally tightened —can cause cars to strike ride if hinge pin has wear and cables unevenly tightened. Check for cable and turn-buckle condition.
- K. Inspect cars for broken or worn tubes, broken screen, bent automatic door return bar—lost or broken springs, worn bolts, enlarged attaching holes, safety key wearing end of bar which safeties door, and worn or damaged door safety key. (See Bulletin L-1-70)

- Inspect condition of door latch and hinges. Remove play and align as necessary.
- M. Inspect car bracket main nuts and safety nut for looseness and upper bolts for wear.
- N. Inspect car attaching bolts for wear or looseness, see Bulletin L-2-75.Note: structural damage is found, contact factory for proper repair procedures.
- P. Inspect gear box for clutch condition and any shaft movement. Repair as required.
- Q. Check engine clutch for spring wear and bearing failure.
- R. Check for loose or worn chains.

#### General Information:

Maximum weight 340 lbs. per car. Maximum RPM is 20—see adjustment in parts book. Ride should be level side-to-side and remove weight from axle when set up. Service axle as required.

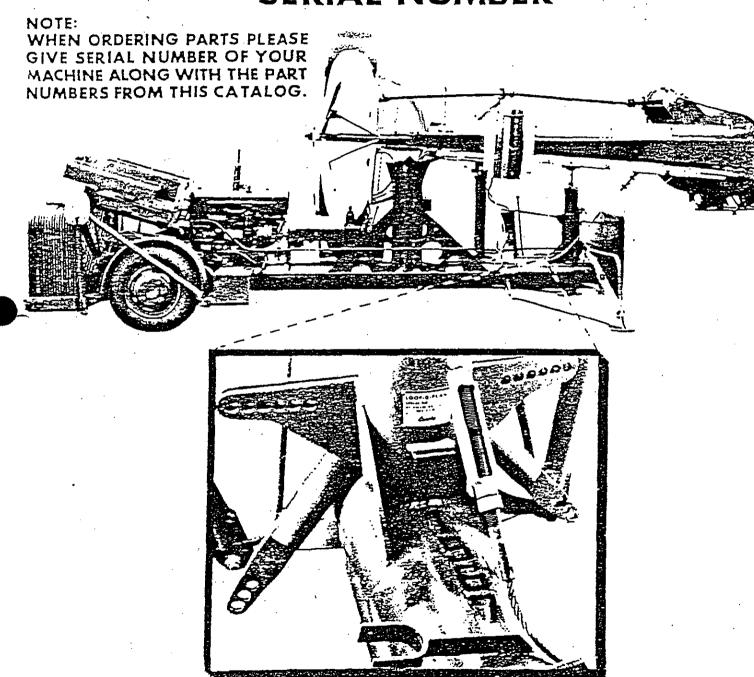


er car\_\_\_ adjut ent in level side-toaxle when set

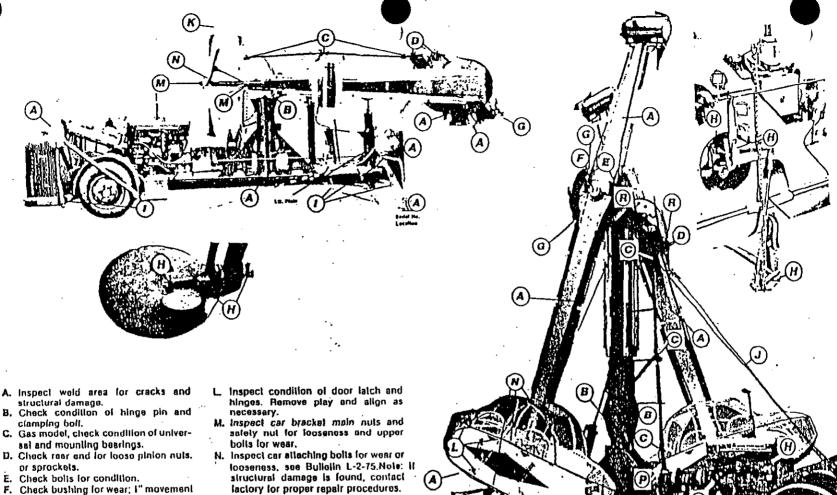
SALES & SERVICE Toll Free outside Oregon (800) 547-9156 Eyerly Inc. P.O. Box 12155 2050 Turner Rd. S.E. Salem, Oregon 97309 503-399-7706



# LOCATION OF LOOP-O-PLANE SERIAL NUMBER



THE SERIAL NUMBERS ASSIGNED TO THE PARK MODEL LOOP-O-PLANE START AT 1301 AND THE PORTABLE MODEL STARTS AT 1500.



- C. Gas model, check condition of univer-
- D. Check rear and for loose pinion nuts.
- F. Check bushing for wear; I" movement at car indicated .060 maximum wear in bushing-end play not to exceed .030.
- G. Check condition of sign hinge.
- H. Inspect wear areas of linkage.
- I. Inspect attaching bolts and pins.
- J. Guy cables are to be equally lightened -can cause cars to strike ride if hinge pin has wear and cables unevenly tightened. Check for cable and turnbuckle condition.
- K. Inspect cars for broken or worn tubes. broken screen, bent automatic door return bar-lost or broken springs, worn bolls, enlarged attaching holes, safety key wearing end of bar which saleties door, and worn or damaged door safety key. (See Bulletin L-1-70)
- P. Inspect gear box for clutch condition and any shaft movement. Repair as required.
- Q. Check engine clutch for spring wear. and bearing failure.
- R. Check for loose or worn chains.

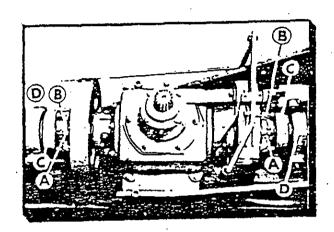
General Information:

Maximum woight 340 lbs, por car. Maximum RPM is 20-see adjustment in parts book, Ride should be level side-toside and remove weight from axle when set up. Service axle as required.

Sales & Service ORI IND. PO Box 15029 Salem, OR 97309 Phone: 503-588-0984 FAX: 503-588-1127



## **CLUTCH & THROTTLE ADJUSTMENTS**



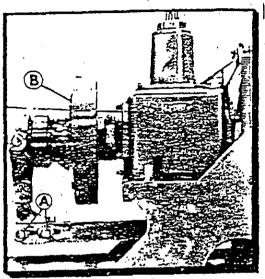


FIG. 2

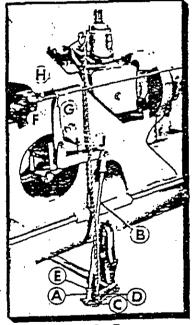


FIG. 3

Adjust the clutches by depressing the lock lever (A) Fig. 1, or by toosening Allen Head Screw, and screwing the clutch finger assembly (B) in a clockwise direction, facing the clutch, to tighten and in a counter-clockwise direction to loosen. They should be adjusted to where it requires some leverage to engage them and should feel and hear a definite snap as the rollers engage the recess in the cam (C). He sure the lock lever (A) drops into the slot, or the Allen Head Screw is tight, when the adjustment is completed.

If the control stand is located on the right hand side of the machine, adjust the cam (C) on the clutch to the right when facing the machine from the control stand. With the control lever on the control stand in the neutral position, adjust the cam by moving the shifter yoke assembly (D) Fig. 1 allowing a maximum of .015" between the cam and collers. Adjust the cam on the left hand side by releasing the two holts (A) Fig. 2 on the shifter yoke and adjusting it in the same manner as the right hand clutch.

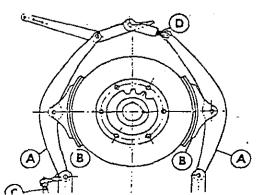
With the clutches in this neutral position, adjust the red end (A) Fig. 1 on the red (B) to where the bolt (C) may be inserted in the red end and the lever (D). When adjustment is completed, be sure to tighten jam nut (E).

With the engine idling and the control lever on the control stand in neutral position and the nut (F) Fig. 3 about 3/4" from the end of red (G), adjust the red to where the spring (H) contacts the nut (F) but does not compress the spring.

Adjust stops ()) to where the engine runs the same speed in either direction. This may be accomplished by first running the ride in one direction and marking the position of the rid (C) in relation to the outer rixl guide and then reversing the ride and adjusting the stop until the rod is in the same position relative to the rixl guide.

Adjust the spring (H) by means of the nut (F) to where the ride revolves from 22 to 24 R.P.M., without lead,

# ELECTRIC MODEL BRAKE ADJUSTMENT



The Brake Supports, Ref.(A), are adjusted on the Motor Plate so as to center the Brake Shoes, Ref.(B), on the Drum. Adjust Brake Stop, Ref.(C), so that the left Brake Shoe, Ref.(B), will clear the Brake Drum about 1, [6]. Adjust the other Shoe by threading Brake Adjuster, Ref.(D), in or out for the same clearance.



## LUBRICATION INSTRUCTIONS

REF.NO.	NAME OF PART	BEARING TYPE	FREQUE TGREASE	OIL
1	CLUTCH SHIFTER LINK	BRONZE		D.
2	CLUTCH SHIFTER LEVER	BRONZE		D
3	CLUTCH THROTTLE LEVER	BRONZE		D
4	A.C. THROTTLE ALTERATION	BRONZE		В
5	SHIFTER RING	ANTI-FRICTION	A	
6	PENDULUM BUSHING	BRONZE	A	
7	DRIVE SHAFT UNIVERSALS	ANTI-FRICTION	U	
8	CONTROL STAND	STEEL	В	
9	DRIVE SHAFT BEARING	ANTI-FRICTION	С	
10	CONTROL STAND	STEEL	В	
11	BRAKE PEDAL	STEEL		В
12	CLUTCH CONTROL ROD	MONO-BALL	D	
13	LOWER GEAR BOX	GEARS		E
14	UPPER GEAR BOX	GEARS		Е
15	CLUTCH ROLLERS & SHAFT	STEEL		D
16	ENGINE CLUTCH SHAFT BEARINGS	ANTI-FRICTION	С	
17	LOWER GEAR BOX	ANTI-FRICTION	В.	
18	CAR	STEEL		F

- (A) DAILY OR EVERY 8 HOURS DURING HEAVY OPERATION.
- (8) EVERY SET-UP.
- (C) EVERY THREE MONTHS.
- (D) DAILY.
- (E) CHECK EVERY MONTH, CHANGE EVERY YEAR, USE EP-90
- (F) KEEP ALL MOVING PARTS OILED DAILY

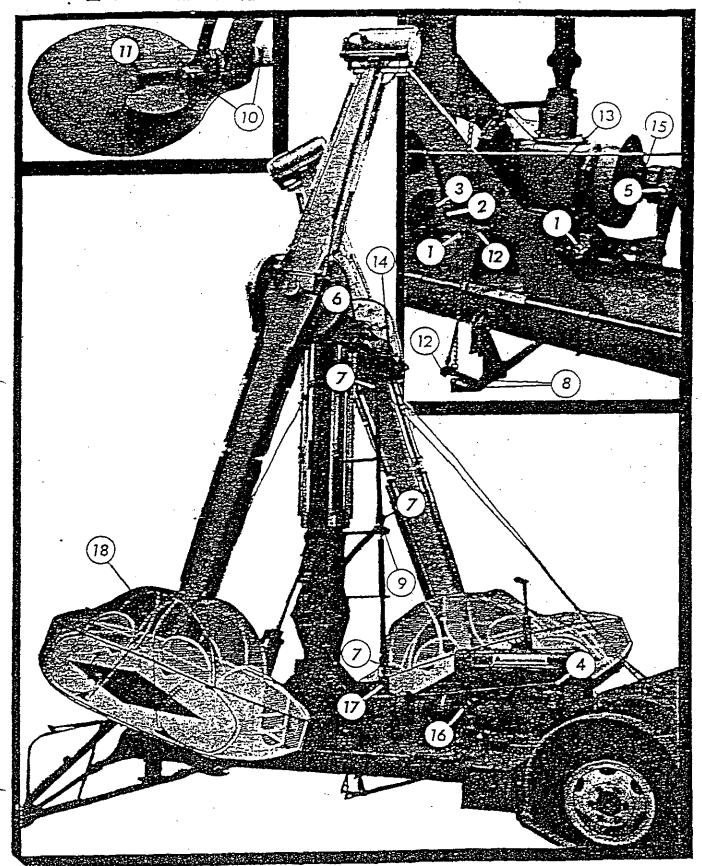
\*USE A MULTI-PURPOSE WATER RESISTANT GREASE WITH AN ACCEPTED EXTREME PRESSURE ADDITIVE, SUCH AS MOLYBOENUM DISULFIDE, ON ALL PRESSURE GUN FITTINGS.

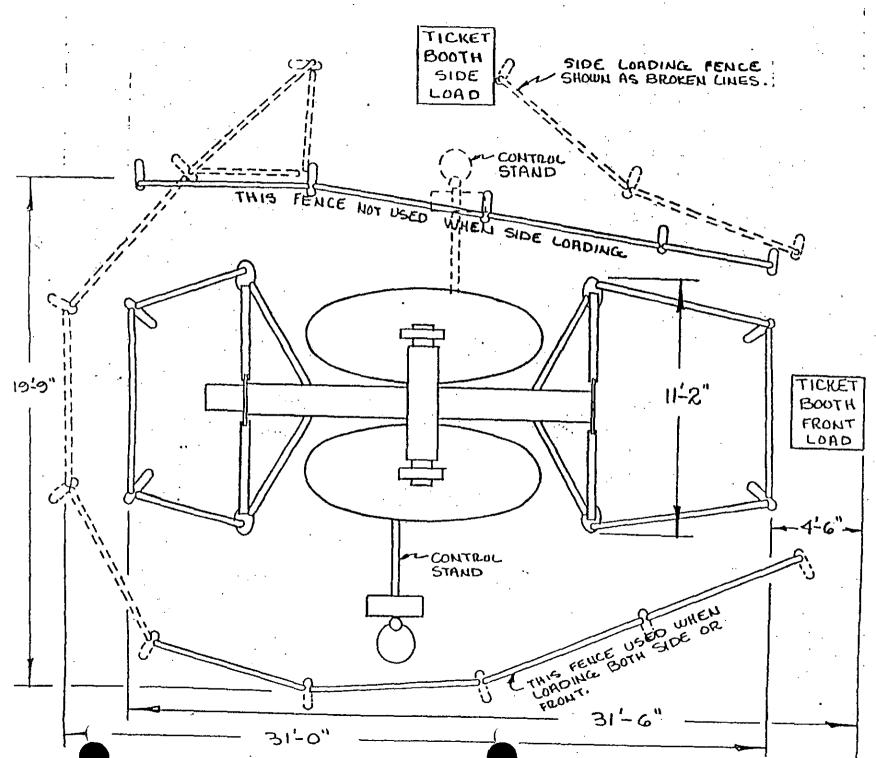
LUBRICATE THE CHAINS EVERY TWO WEEKS WITH AN APPROVED LUBRICANT. NOTE: SEE ALLIS-CHALMERS OPERATION & MAINTENANCE MANUAL FOR SERVICE OF G-138 ENGINE.

THE ABOVE FREQUENCY OF GREASING THE BEARING IS FOR AVERAGE OPERATING CONDITIONS WITH SEALS INTACT.



# LUBRICATION INSTRUCTIONS

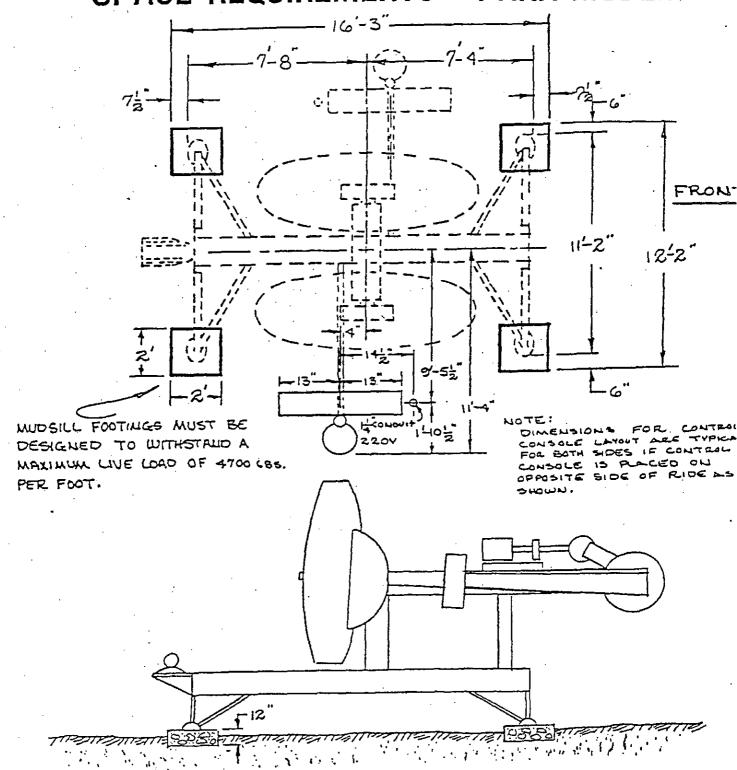




PLAN VIEW & FENCE PARK MODEL



# SPACE REQUIREMENTS—PARK MODEL



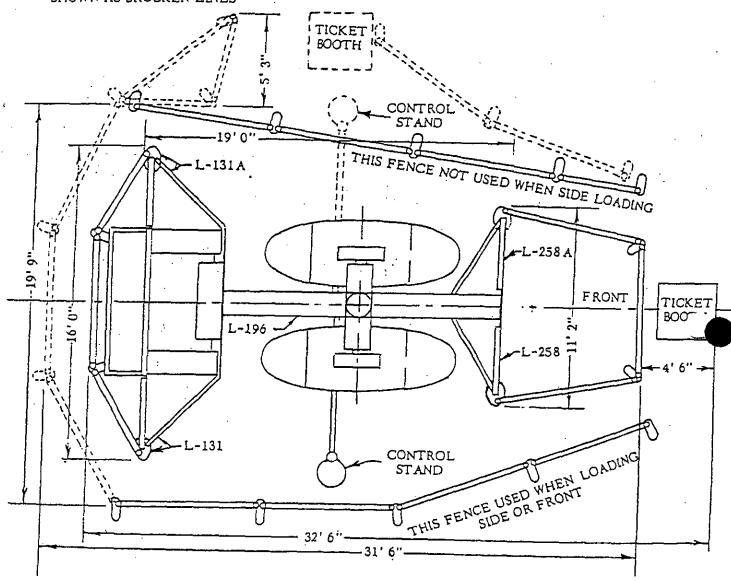
POWER REQUIREMENTS:

ONE MAIN 1/4" CONDUIT WITH 3-#2 T.W. BLACK, 1-# 10 WHITE (NEUTRAL) PLUS "B FOR GROUND HOTT 208/220V. 30.60~ 117V, 10,60~



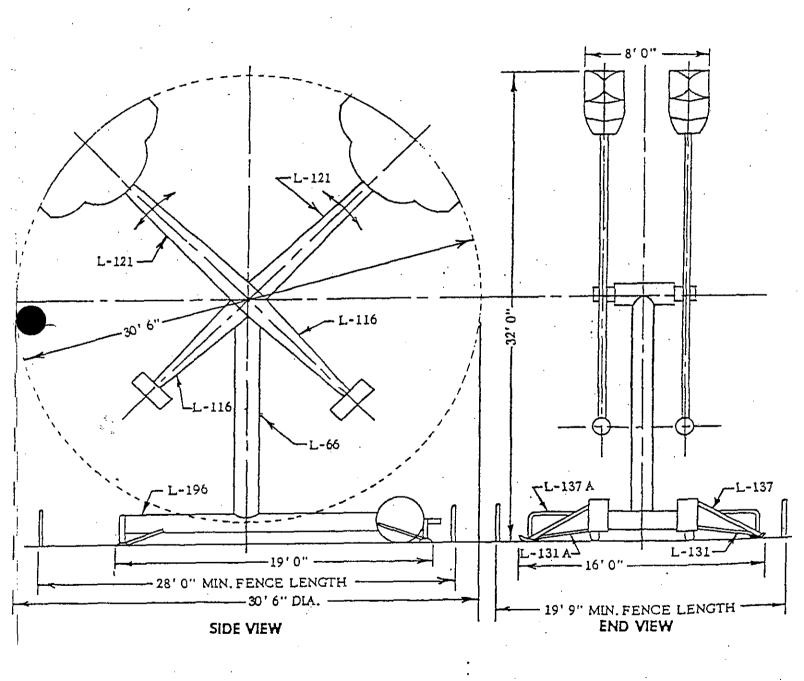
## PLAN VIEW & FENCE LAYOUT

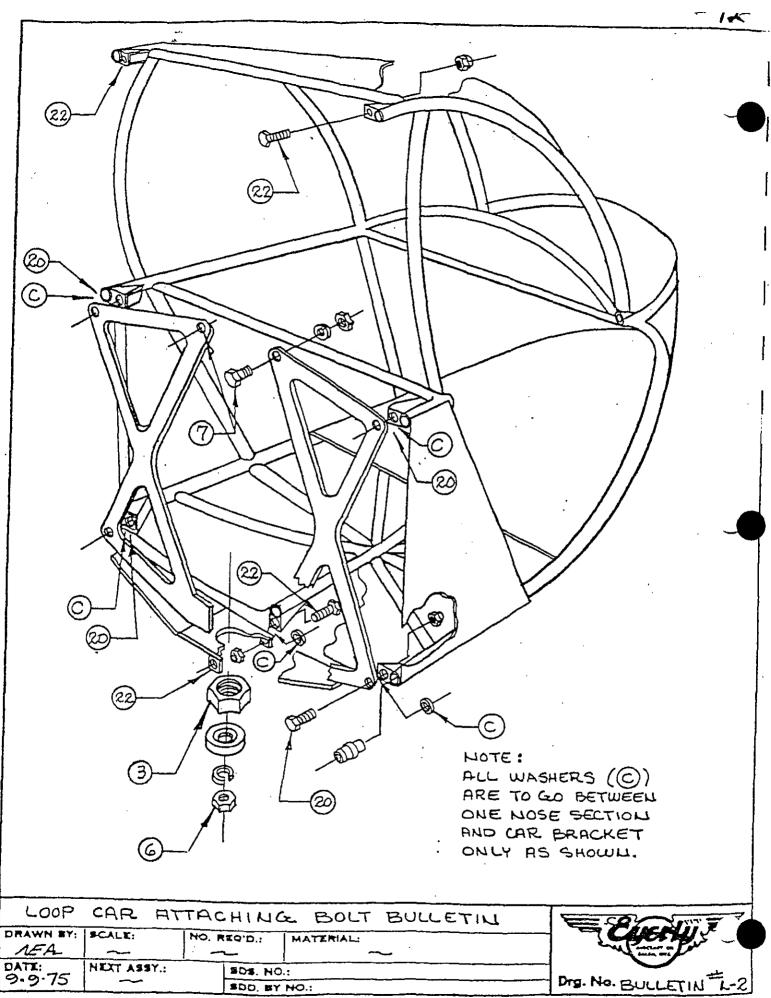
SIDE LOADING FENCE AND TICKET BOOTH SHOWN AS BROCKEN LINES





## SPACE REQUIREMENTS



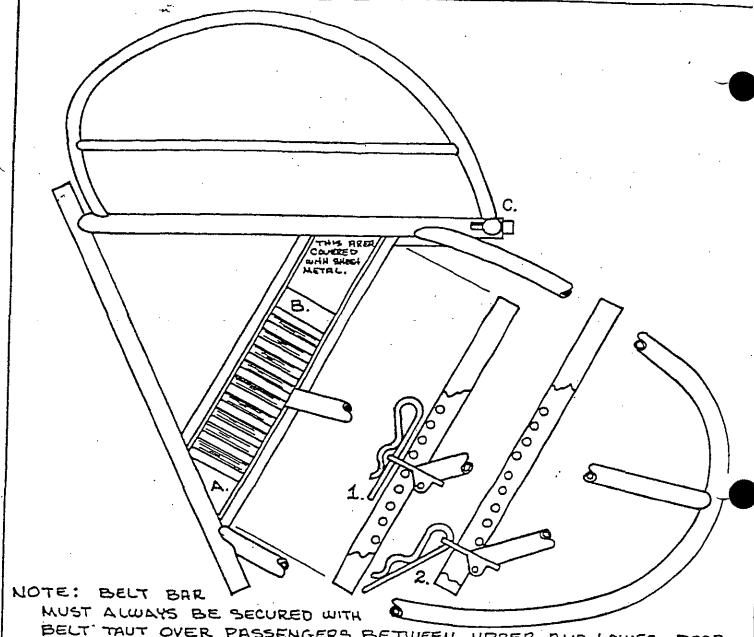


### LOOP-O-PLANE CAR ATTACHING BOLT REPLACEMENT

FACTORY CHECKING OF SEVERAL UNITS HAS REVEALED SOME INSTANCES OF IMPROPER TIGHTENING OF THE ATTACHING BOLTS AND OTHER MAINTENANCE FAILINGS WHICH MAY RESULT IN FAILURES IN THE BOLT BRACKETS AND ADJACENT MEMBERS. SHOULD YOU FIND ANY LOOSENESS EVIDENT AT THE ATTACHING FREAS CAREFULLY INSPECT ALL AREAS OF CARESEMBLY. ANY FRACTURES SHOULD BE REPORTED TO THE FACTORY IMMEDIATELY TO DETERMINE PROPER REPAIRING PROCEDURE.

- 1. REMOVE ALL SEAT UPHOLSTERY AND HEAD RESTS.
- 2. BACK NUTS OFF ON THE FOUR 3/8 x 11/2" (20) BOLTS AND THE FOUR 3/8 x 1" (22) BOLTS NOT MORE THAN 1/4".
- 3. REMOVE & REPLACE, ONE AT A TIME, THE FOUR \$8×11/2" (20) BOLTS WITH THE NEW GRADE B \$8×11/2" BOLTS SUPPLIED IN THE KIT. WHEN REPLACING EACH (20) BOLT ADD ONE \$8"SHE FLATUASHER (C) BETWEEN ONE CAR NOSE SECTION AND CAR BRACKET ONLY. THE PLACING OF THE WASHERS BETWEEN THE NOSE AND BRACKET IS TO ASSURE A PROPER CLAMPING LOAD BETWEEN THE THREE ASSEMBLIES. DO NOT TIGHTEN BOLTS AT THIS TIME.
- 4. REMOVE & REPLACE, ONE AT A TIME, THE FOUR 38x 1" (22) BOLTS WITH THE NEW GRADE B 3/8" X 1" BOLTS SUPPLIED, IN THE KIT. START WITH THE TWO BOLTS AT THE TOP OF THE CAR ASSEMBLY. WHEN REPLACING THE TWO BOTTOM CENTER BOLTS, MAKE SURE THE WASHER (C) IS PLACED BETWEEN THE SAME NOSE SECTION AND CAR BRACKET AS WASHERS WERE PLACED IN STEP # 3.
- 5. USING A TORQUE WRENCH TIGHTEN THE GRADE 8 BOLTS TO 40 TO 50 FOOT POUNDS DRY. DRY MEANS THE THREADED AREA OF THE NUT & BOLT HAVE NO LUBRICANT ON THEM.
- 6. CHECK THE TWO (7) BOLT ASSEMBLIES ON EACH CAR BRACKET FOR PROPER TIGHTHESS, REPLACING IF LOOSE OR WORN WITH GRADE 5 OR BETTER, TORQUE TO 200 TO 250 FOOT POUNDS DRY.
- 7. CHECK (3) NUT FOR LOOSENESS ON BOTTOM OF EACH CAR ASSEMBLY BY BACKING OFF (6) NUT AND APPLYING UP TO 1000 FOOTPOUNDS TORQUE DRY TO (3) NUT AND RETIGHTEN (6) NUT TO 160 FOOT POUNDS TORQUE DRY.
- 8. REPLACE ALL UPHOLSTERY.

LOOP	CAR AT	TACHING	BOLT BULLETIN	Electus -
DRAWN BY:	SCALE:	NO, REQ'D.:	MATERIAL:	and The state of t
DATE:	NEXT ASSY.:	SDS, NO		Drg. No. BULLETIN 1-2
9-9-75	1	) SDD. #1	<b>NO.</b> :	PAGE 1662

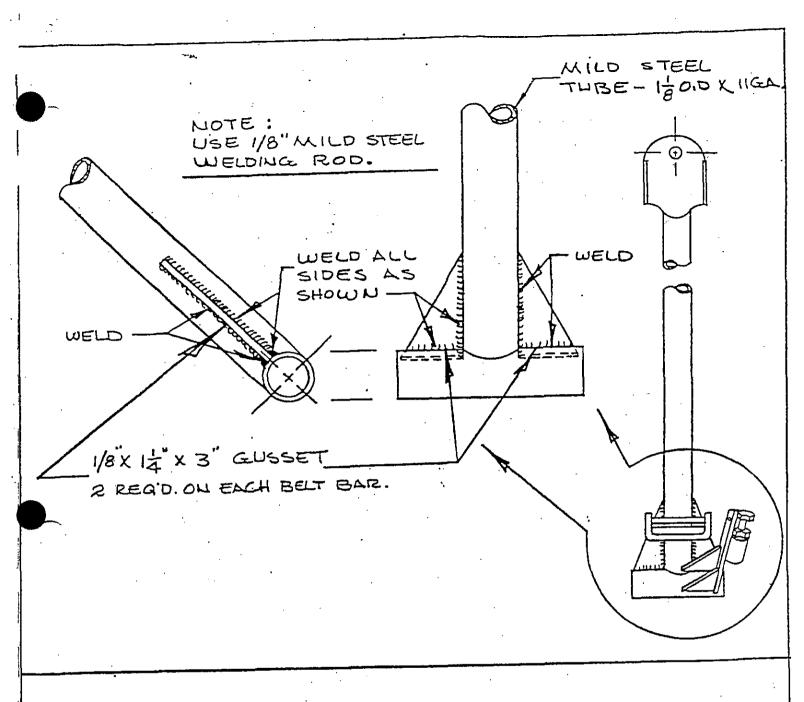


BELT TAUT OVER PASSENGERS BETWEEN UPPER AND LOWER DOOR LADDER RUNGS. SPRING SAFETY KEY MUST BE RETAMED AT FIRST DETENT (FIG.1.). IF BELT BAR IS IMPROPERLY SECURED BELOW BOTTOM RUNG (POINTA) OR ABOVE TOP RUNG (POINT B.) IN DOOR LADDER AND IF SAFETY KEY IS IMPROPERLY THROUGH BELT BAR PAST DETENT TO THE TOP OF THE LOOP (FIG. 2.) AND IF SEPARATE DOOR LATCH (FIG. C.) IS NOT PROPERLY FASTENED, DOOR MAY OPEN.

FACTORY APPROVED AND RECOMMENDED MODIFICATION:
INSTALL GUSSETS (1/8" MATERIAL) AT POINTS A & B COMPLETELY
FILLING AREA TO WITHIN 1/2" OF HEAREST CADDER RUNG, ATTACK BY WELDING.

THIS INSTRUCTION MAY ALSO BE USED WITH FLY-O, ROCK-O & ROLL-O-PLANE CAR DOORS

D	OOR MOD	IFICATION	BULLETIM	- 10 Venn
DRAWN BY:	SCALE:	NO. REQ'D.:	MATERIAL:	CISIN
DATE:	NEXT ASSY.:	SDS, NO	:	$\dashv$ $\smile$
4-6-78	_ ~	SDD, SY	NO.:	Drg. No. L-8-78



PLIE TO IMPROPER OPERATIONAL PRACTICES, THERE HAVE BEEN REPORTED FAILURES OF THE CAR BELT BAR ASSEMBLY (L-421). REINFORCEMENT GUSSETS ARE REQUIRED TO ELIMINATE THIS PROBLEM. GUSSETS SHOULD BE INSTALLED AS SHOWN IN THE ABOVE DRAWING.

BE	ELT BA	REI	NFOR	CEMENT	Elective
DRAWN BY:	SCALE:	NO. REQ'D.:	MATERIA	AS SHOWL	ancient on full
	NEXT ASSY.:	SDS. NO		EFF. W/SN:	Drg. No. h-1-70

#### ASSEMBLY INSTRUCTIONS

NOTE: TAPERS TO BE CLEANED WITH SUITABLE SOLVENT AND WIPED DRY. DO NOT USE MOLYBDENUM DISULFIED OR EQUIVALENT FRIGTION REDUCING COMPOUNDS ON FASTENERS OR TAPER.

- I. INSTALL SEAL AND NEEDLE BEARING IN REAR BEARING CARRIER.

  2. INSTALL "O" RING IN COUPLING FACE. MOUNT REAR BEARING CARRIER TO COUPLING FACE USING THE SIX 12 POINT CAPSCREWS WITH "O" RINGS. TORQUE CAPSCREWS TO 27-30 LB. FT TORQUE CAPSCREWS TO 27-30 LB. FT.
- INSTALL BALL BEARING INTO FRONT BEARING CARRIER. CARE MUST BE TAKEN TO NOT DAMAGE CIRCUIT FRONT COVER ADJACENT TO FLAT HEAD SCREWS.
- INSTALL CUTPUT SHAFT OR OUTPUT FLANGE ASSEMBLY THROUGH REAR BEARING CARRIER AND INTO TAPER IN RUNNER HUB. SUPPORT THE OUTPUT END OF OUTPUT SHAFT OR OUTPUT FLANGE ASSEMBLY AND PRESS BALL BEARING ONTO OUTPUT SHAFT UNTIL BEARING INNER RACE OVERHANGS SHAFT END 0.060" TO 0.120" CAUTION: DO NOT PRESS FLUSH WITH SHAFT END. PRESS FORCE NEVER TO EXCEED 24,000 LBS. INSTALL ROLL PINS IN RETAINER WASHER WITH ROLL PINS AND CAPSCREW AND TORQUE TO 177-195 LB. FT. BEARING AND RUNNER ARE NOW IN PLACE. NOTE: TO HOLD SHAFT FROM TURNING WHILE TORQUING CAPSCREW, USE OPEN END OR PIPE WRENCH ON RETAINER WASHER.
- MOUNT SELECTED INPUT GROUP WITH "O" RING AND SIX 12 POINT CAPSCREW WITH "O" RINGS TO INPUT
- 6. CHECK AIR TIGHTNES WITH 5-10 PSI PRESSURE APPLIED THRU FILLER HOLE.

### SERVICE DISASSEMBLY INSTRUCTIONS

- 1. REMOVE THE TWO PIPE PLUGS IN THE FRONT COVER AND IMPELLER, ALLOW FLUID TO DRAIN COMPLETELY.
- 2. REMOVE COUPLING ASSEMBLY FROM INSTALLATION.
- 3. REMOVE THE SIX 12 POINT CAPSCREWS AND "O"RINGS FROM THE INPUT GROUP. REMOVE INPUT GROUP AND "O"RING.
- REMOVE HEX HEAD CAPSCREW WHICH RETAINS THE OUTPUT SHAFT OR OUTPUT FLANGE ASSEMBLY.
- TO REMOVE MODELS HG OR HGF OUTPUT SHAFT AND MODEL HGM OUTPUT FLANGE ASSEMBLY, PACK SHAFT CENTER SCREW HOLE WITH GREASE. WRAP THREAD OF REMOVED HEX HEAD CAPSCREW WITH SEVERAL LAYERS OF TEFLON TAPE TO SEAL AGAINST HIGH GREASE PRESSURE. IN SERT SCREW THROUGH RETAINER WAS INTO GREASE FILLED HOLE AND TIGHTEN. REPACK HOLE IF NECESSARY UNTIL RELEASE OF TAPER JOINT IS ACHIEVED. TO REMOVE MODEL HBM OUTPUT SHAFT, FIRST REMOVE CUTPUT BEARING CARREST INSTRUCTION NO.6. SUPPORT RUNNER ON A TUBE # AND PRESS OUTPUT SHAFT FROM RUNNER. USE PLUG AGAINST OUTPUT SHAFT TO PROTECT THREADS IN SHAFT.
- 6. REMOVE SIX 12 POINT CAPSCREWS AND "O" RINGS FROM OUTPUT BEARING CARRIER. REMOVE CARRIER ASSEMBLY AND "O" RING.
- IF REMOVAL OF BEARING AND SEAL FROM OUTPUT BEARING CARRIER IS NECESSARY, PRESS OUT FROM COUPLING SIDE.
- 8. TO REMOVE INPUT BALL BEARING USE A ROD AND TAP OUT FROM COUPLING OUTPUT END.

NOTE: IF THE FRONT COVER AND IMPELLER ASSEMBLY IS DAMAGED, THE BASIC UNIT MUST BE REPLACED.

- \* TOOLS REQUIRED FOR DISASSEMBLY.
- I. TEFLON TAPE
- 2. TUBE (3.00"00 X 2.06"10 X 7.00" LONG)

RECOMMENDED REPLACEMENTS FOR OVERHAUL:

- I. SEAL
- 2. BEARINGS
- 3. ALL "O" RINGS

	OITH ADOL	WOLL WALL DE	M, HBM FLUID RVICE INSTRU	COUPLINGS ——		_
.5	DRAWN BY:		NO. REQ'D.:	MATERIAL:		
	DATE: 6-20-77	NEXT ASSY.:	\$0\$. NO.	:	Drg. No. L - 7- 77	
L	<u> </u>		SDD, MY	NO.:	10,0,40, 1-11	



PO Box 13483 Salem, OR 97309 Phone (503) 588-0984 FAX (503) 588-1127

Guy D. Sherbourne, Sr., President

#### LOOP-O-PLANE OPERATION

One man operates during "grind" periods with one additional loader required for capacity operation. Control stand functions from either side of ride, allowing full flexibility on location. The clutches and throttle are operated by one lever. Braking is accomplished by releasing spring-loaded foot pedal, which requires an operator to be at the control stand whenever the ride is in motion.

#### MAX--RPM:

- Gas -- 22 RPM
- Electric -- 22 RPM

#### Capacity:

- 3 Kids or 2 Adults
- 340 Lbs. -- Maximum weight per car
- Balance load per side -- Rock car back and forth until cars will go over top 3 or 4 times. Stop ride and run opposite way.
- Do not stop and hold cars upside down.

(3/01)





## OREGON RIDES INC.

**MEMBER** 

### LOOP-O-PLANE CHECKLIST

(Device) Name		,	Serial Number		
detailed explan	ation of Inspection a us) is addition to yo	tory Parts Catalog and Operating Instruction M. tion and Maintenance procedures. (Additional control to your routine inspection and maintenance the		Operating Instruction Manual for rocedures. (Additional copies are	
DESCRIPTION	WHAT TO CHECK	0K/ /BY	DATE	NOTES AND REMARKS	
1. Mudsills	Cracks and			Notify O.R.I. if damage or cracks are discovered.	
2. Column	structural damage.			are discovered,	
3. Sweeps			,		
Column Hinge rin and Clamp Bolt	Damage or looseness.			Replace hingé pin if clearence exceeds +.065". Replace clamping bolt and nut if threads are damaged or worn excessively.	
5. Upper gear Box	Loose pinion nuts sprockets and lubricant.			If pinion is loose, adjust bearing to snug fit. Replace damaged or worn nuts. Lubricate as per instructions in Operating Manual.	
c. Counter - weight Bolts	Worn or damaged bolts, nuts, correct size & type,		;	Replace with factory specified size and type,	
, Pendulum Bushing	Wear; diameter and end movement			If car moves in excess of JW toward and away from column, with ride in operating position, replace.	
Fasteners	Worn, damaged or missing. Wrong type or size.			Replace with factory specified size and type.	

DESCRIPTION	WHAT TO CHECK	0K/ /BY	DATE	NOTES AND REMARKS
), Sign Hinge & Fastenings	Worn, damaged correct size bolts. Enlarged holes.	·		Replace with correct size bolts and factory parts.
O. Guy Cables &:Turnbuckles	Corrosion,broken strands, kinks, damaged turn - buckles.		/	Replace if any of these conditions exist.
1. Mudsili Attaching Points & Pins	Cracks or structural damage. Loose fitting			Contact O.R.I. for repair procedures. Replace worn pins and damaged safeties.
12. Cars ,	Loose, cracked or missing screen Worn or broken frame tubing.			Contact O'.R.I. for repair procedures on tubing. Repair or replace screen.
13. Automatic Belt Bar Assy	Condition of all fasteners, lost or broken spring, belt bar door key hole for wear. (Max. from out side of hole to end of bar 3/8") Worn or damaged door keys, missing door key straps, restraint belt condition.			Replace worn belts. Enlarged key holes should be weldfilled and drilled to correct size. Install new fastenings, keys and straps as required.
14. Door Latch & Hinges	Broken or miss- ing parts. Proper alignment. Positive locking			Align hinges for proper door lock ing. Replace missing, worn, or broken parts.
15. Car Attachin Bolts & Nuts	Looseness, wear and structural damage.			If bolts are loose or structural damage is found, contact O.R.I. for information on bulletin # L-275 and proper repair procedure
16. Chains & Sprockets	Chain stretch & wear. Sprocket teeth for wear.			If chain is stretched it must be replaced. Sprockets that are worn to excess, or otherwise damaged, must be replaced.

- DESCRIPTION	WHAT TO CHECK	0K/ /BY	DATE	NOTES AND REMARKS
17. Electrical Components	Worn or bad cords or plugs, light rings & brush assemblies.	·		Replace worn or unsafe cords & plugs with proper size & type. Replace brushes & light rings if worn excessively.
ADDITIONALLY	FOR GAS MODEL		<u> </u>	
18. U-Joints	Excessive wear & missalignment.			Replace or repair as necessary. Lubricate.
19. Mounting Bearings (U- joint)	Wear & lubrica - tion.			Replace as necessary. Lubricate.
20. Engine Clutch	Wear & pilot bearing failure.			Repair or replace as necessary.
21. Clutch & Throttle Control Linkage	Excessive slack & wear.			Adjust, repair or replace loose or worn parts.
22. Lower Gear Box	Shaft movement, clutch condition		•	Shaft should have no movement laterally or Clutch should be positive. Repair or replace as required.
	· · · · · · · · · · · · · · · · · · ·			

NOTE: When ordering parts, please give machine serial number along with the parts numbers from the Parts Catalog and Operating Instruction Manual.