

*MFB: Eyerly  
Ride: Rock O Plane*

### FAX COVER SHEET

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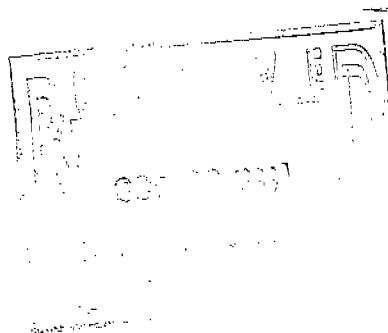
DATE:

October 29, 1999

SUBJECT:

Rock-O-Plane Manual

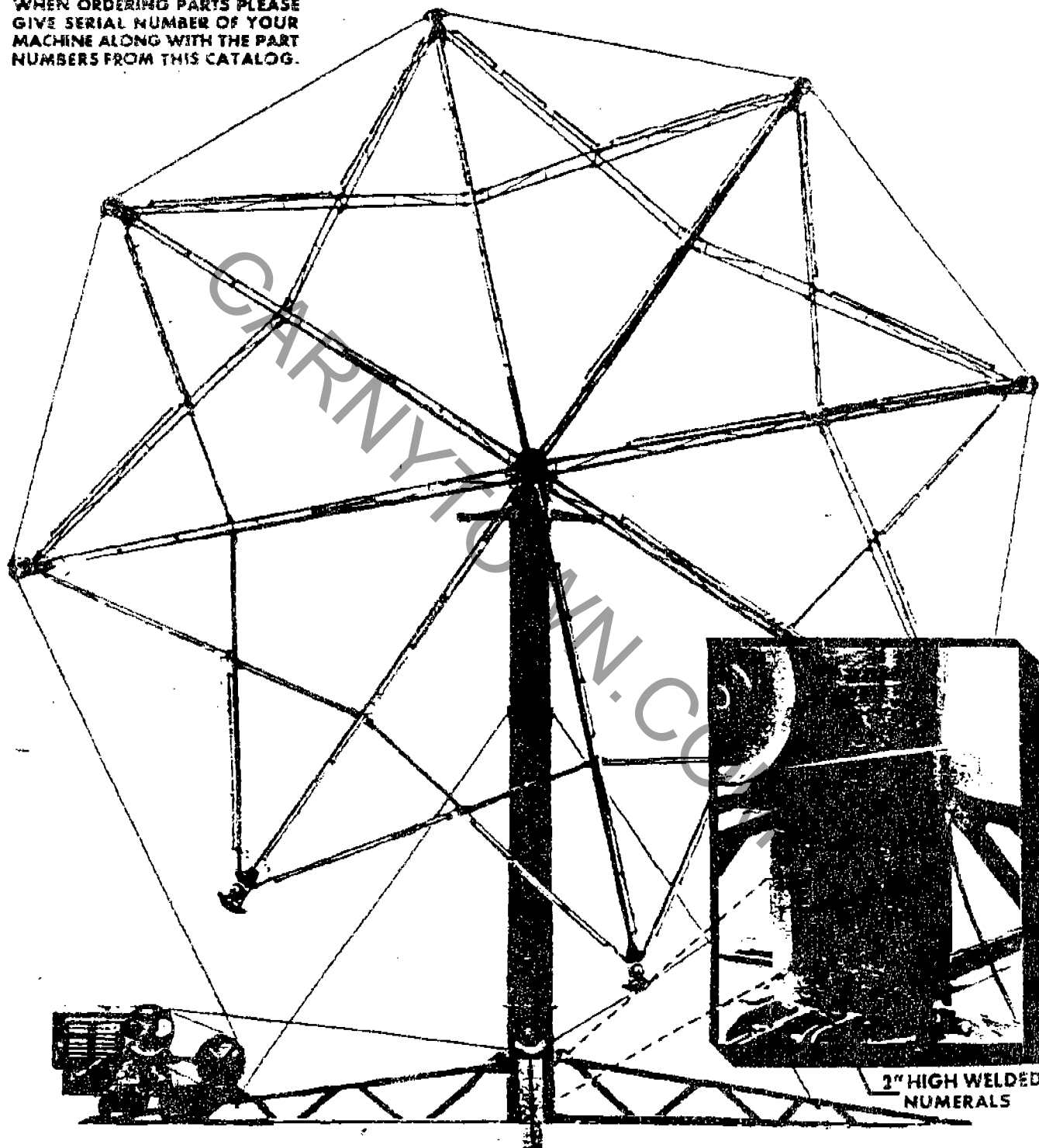
*11 pages including cover*





# LOCATION OF SERIAL NUMBERS ON ROCK-O-PLANE

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



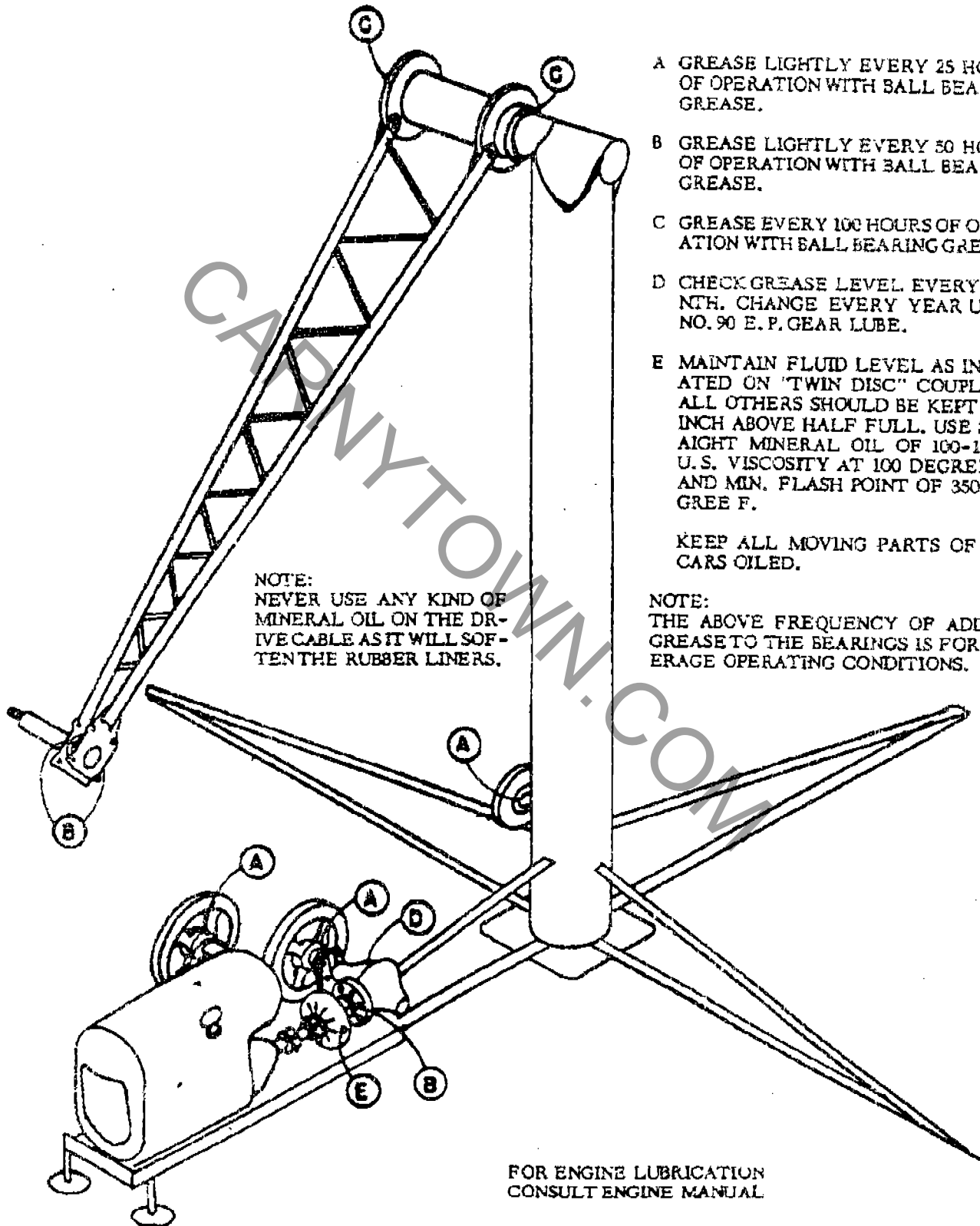
2" HIGH WELDED  
NUMERALS

SERIAL NUMBERS ARE FROM 6000 & UP AND ARE 2" HIGH  
WELDED NUMERALS ON COLUMN AS INDICATED.





## LUBRICATION INSTRUCTIONS



NOTE:  
NEVER USE ANY KIND OF  
MINERAL OIL ON THE DR-  
IVE CABLE AS IT WILL SOF-  
TEN THE RUBBER LINERS.

- A GREASE LIGHTLY EVERY 25 HOURS OF OPERATION WITH BALL BEARING GREASE.
- B GREASE LIGHTLY EVERY 50 HOURS OF OPERATION WITH BALL BEARING GREASE.
- C GREASE EVERY 100 HOURS OF OPERATION WITH BALL BEARING GREASE.
- D CHECK GREASE LEVEL EVERY MONTH. CHANGE EVERY YEAR USING NO. 90 E. P. GEAR LUBE.
- E MAINTAIN FLUID LEVEL AS INDICATED ON "TWIN DISC" COUPLING. ALL OTHERS SHOULD BE KEPT ONE INCH ABOVE HALF FULL. USE STRAIGHT MINERAL OIL OF 100-175 S. U. S. VISCOSITY AT 100 DEGREE F. AND MIN. FLASH POINT OF 350 DEGREE F.

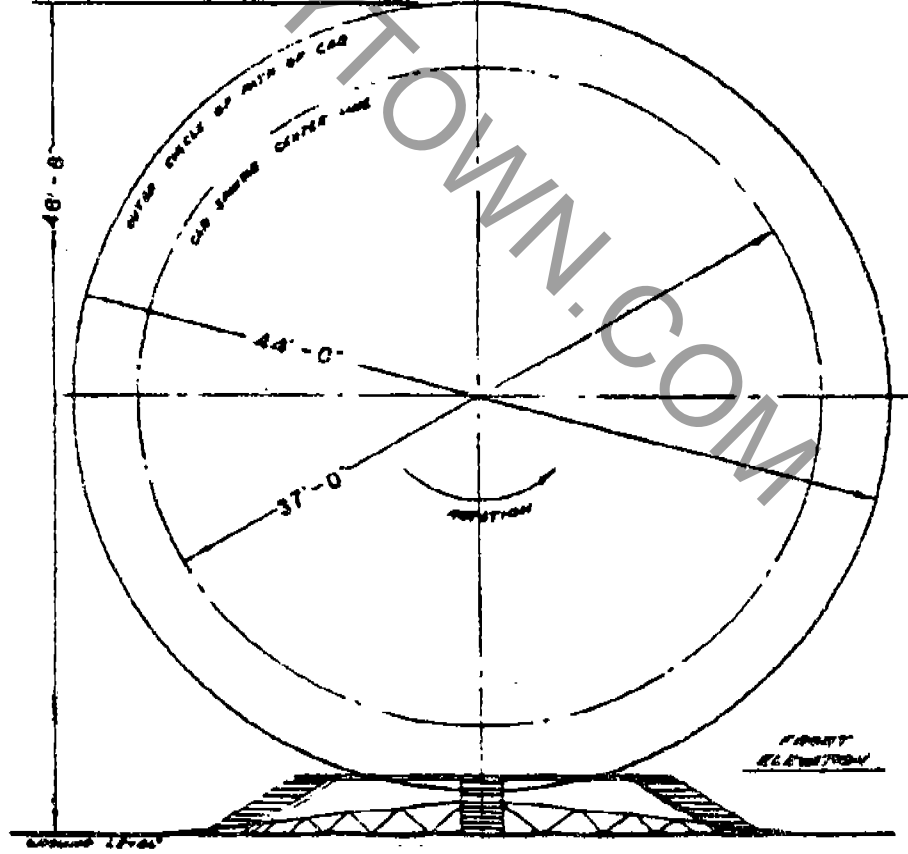
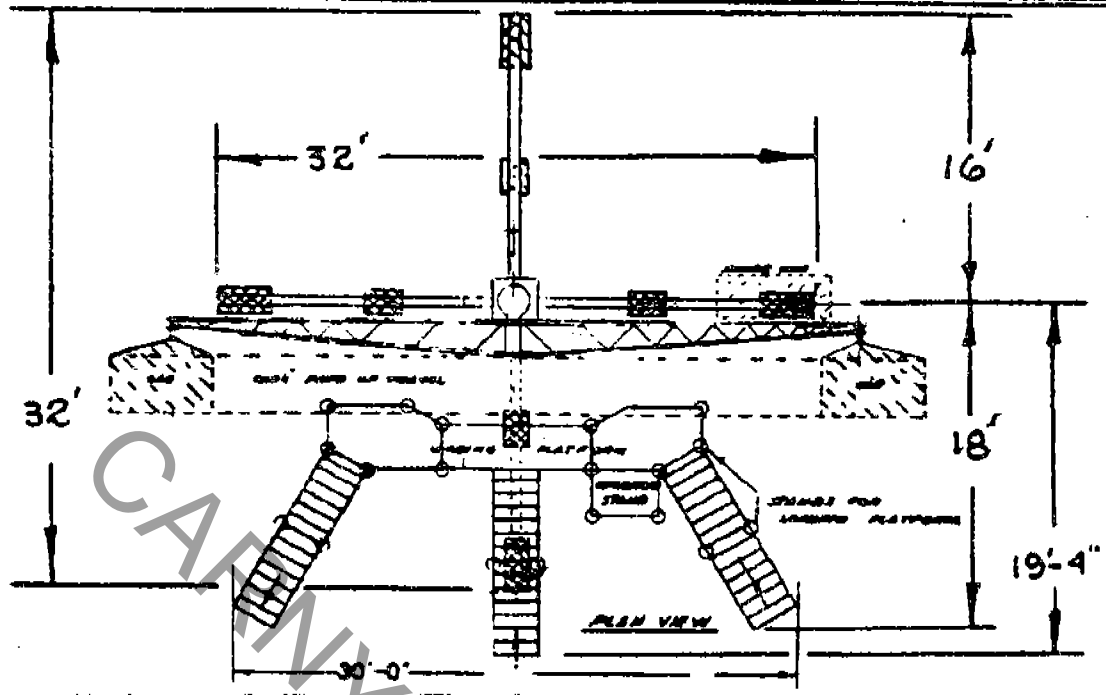
KEEP ALL MOVING PARTS OF THE CARS OILED.

NOTE:  
THE ABOVE FREQUENCY OF ADDING GREASE TO THE BEARINGS IS FOR AVERAGE OPERATING CONDITIONS.

FOR ENGINE LUBRICATION  
CONSULT ENGINE MANUAL



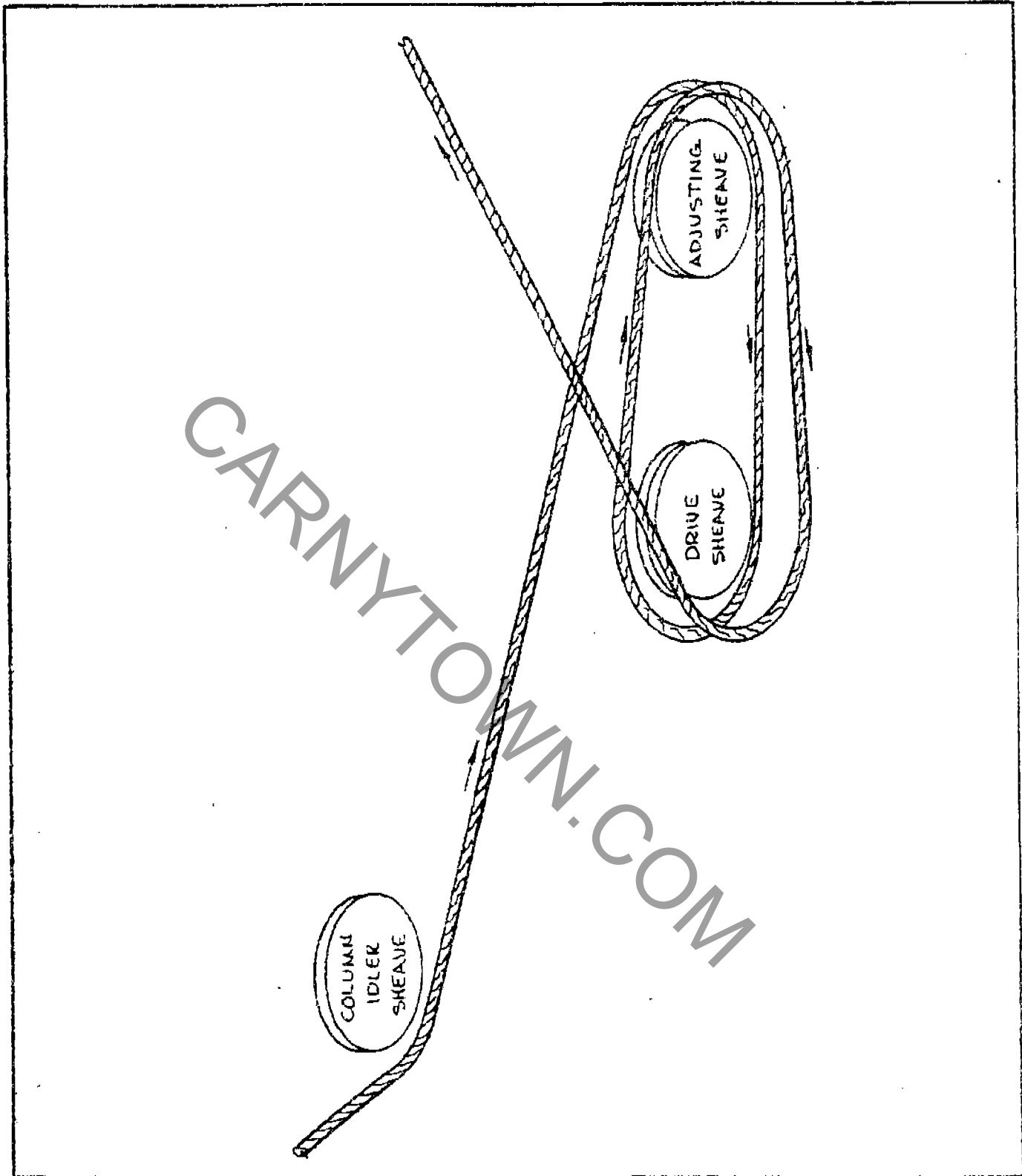
# ROCK-O-PLANE GROUND PLAN




ROCK-O-PLANE SET-UP DIMENSIONS

*Eyerly Aircraft Co.*

SALEM, OREGON

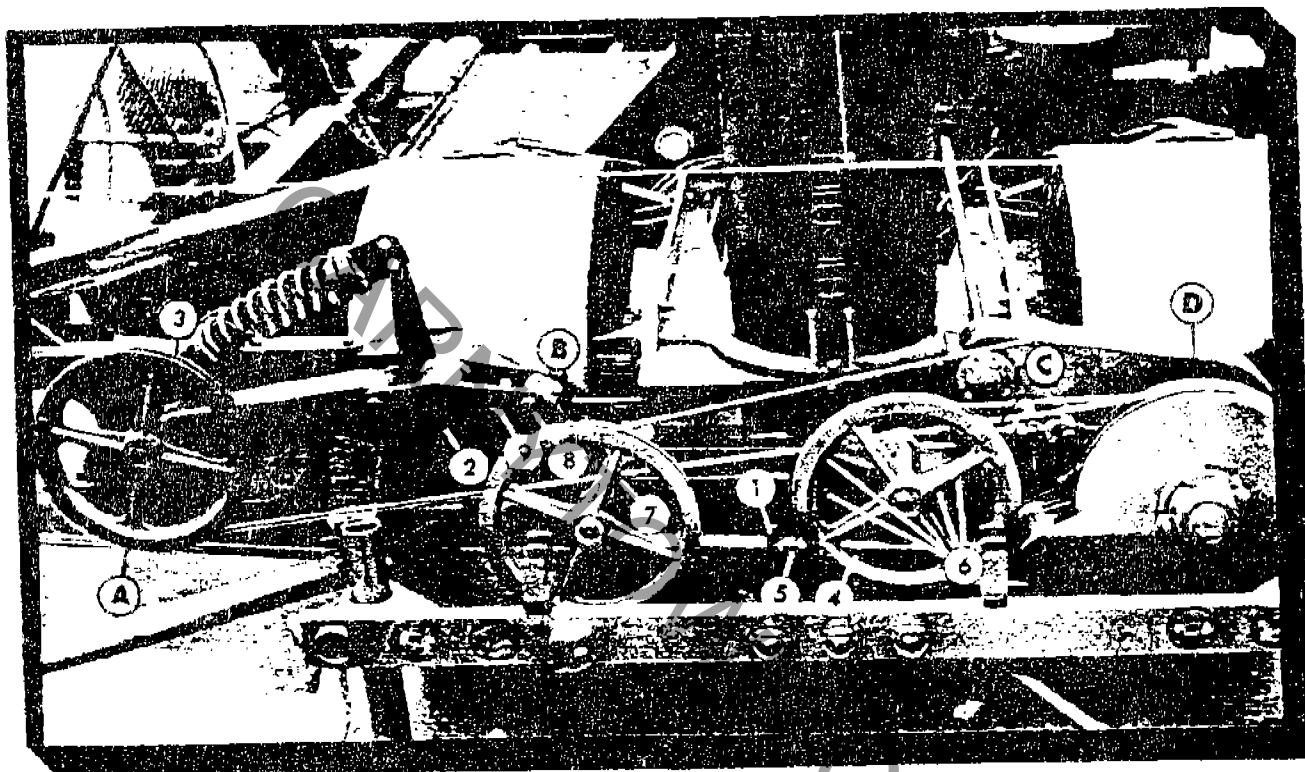


<b>DIAGRAM 'OF DRIVE CABLE WRAP</b>				
<b>DRAWN BY:</b> AEA	<b>SCALE:</b> NONE	<b>NO. REQ'D.:</b> ~	<b>MATERIAL:</b> ~	
<b>DATE:</b> 1-25-77	<b>NEXT ASSY.:</b>	<b>SOS. NO.:</b>	<b>SDD. BY NO.:</b>	

Drq. No. W-5-77



## INSTRUCTIONS FOR ADJUSTING PORTABLE ROCK-O-PLANE CABLE



1. Before adjusting Cable make sure Sheaves A & B are parallel to Sheave D. Sheave C is offset 1" from top to bottom to allow the Cable to change grooves in Sheave D.

2. To adjust Cable tension always begin with adjustments in their closest position to the Drive Sheave D. The illustration shows all adjustments in this position.

3. Correct Cable tension is achieved by turning the Adjusting Screw (1) until points (2) & (3) do not make contact with drops, without load, when running.

4. When point (2) makes contact and there is no more adjustment in the Adjusting Screw (1), turn Adjusting Screw in until it stops, then remove Bolt (4) and slide Inner Tube (5) out to the next Hole. There is one more hole to provide further adjustment. Adjust Cable as

outlined in No. 3.

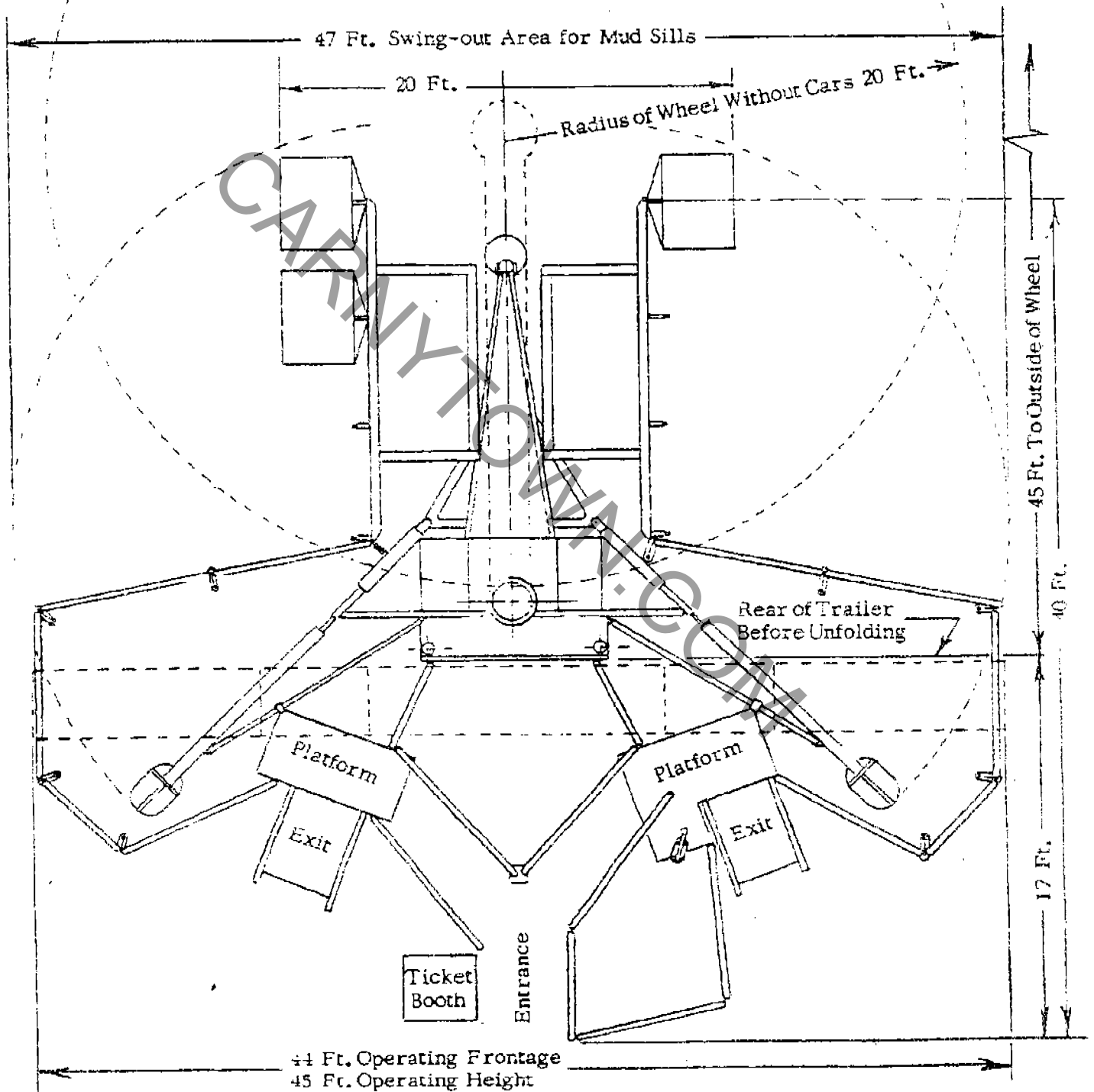
5. Should cable slack become more than Adjusting Screw Assembly can remove, place Adjusting Screw (1) and Inner Tube (5) back to their original position. Then loosen Bolts (6) and slide Sheave (C) to the left by tightening Nut (7). Secure Bolts (6) and adjust Cable as outlined in No. 3. Another set of holes are also provided in this adjustment and can be used when necessary. Above procedures provide proper Cable tensioning under normal conditions.

6. A third adjustment can be made under extreme conditions. All previous adjustments should be returned to their original positions. Remove Bolt (8) and install at (9) then follow procedures as outlined in No. 3 through No. 5.

**NOTE: INSTALLATION OF A NEW CABLE REQUIRES THAT ALL SLACK ADJUSTMENTS BE RESTORED TO THEIR ORIGINAL POSITION. THE NEW CABLE SHOULD BE WIPED FREE OF OIL WITH A RAG AND IF POSSIBLE, ALLOWED A BREAK-IN PERIOD OF 1 TO 2 HOURS OF UNLOADED OPERATION. DURING THIS PERIOD GRADUALLY RE-ADJUST THE TENSION AS OUTLINED IN STEPS 3, 4 & 5 TO COMPENSATE FOR STRETCHING OF THE CABLE. SPARE CABLES SHOULD BE PRE-STRETCHED, AS OUTLINED ABOVE, BEFORE BEING PLACED IN SERVICE.**



# PORTABLE ROCK-O-PLANE SPACE REQUIREMENTS & FENCE SET-UP





# LUBRICATION INSTRUCTIONS

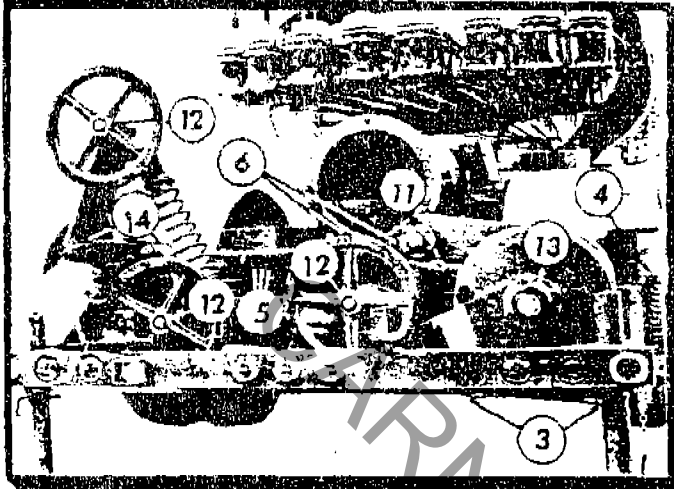


FIG. 1

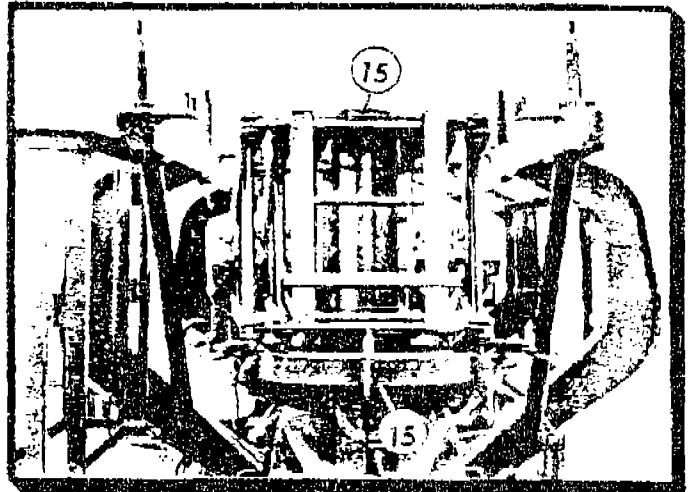


FIG. 2

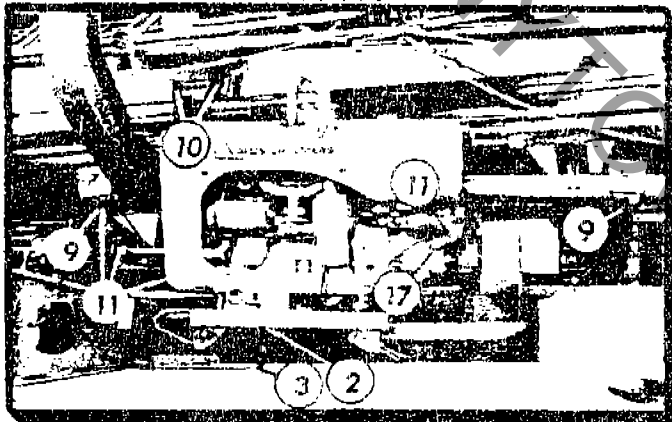


FIG. 3

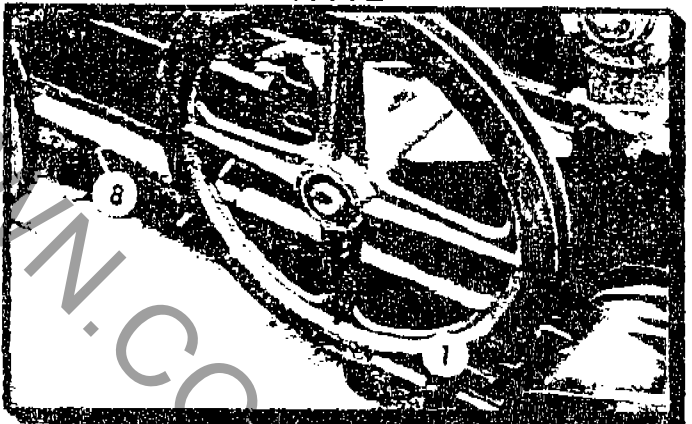


FIG. 4

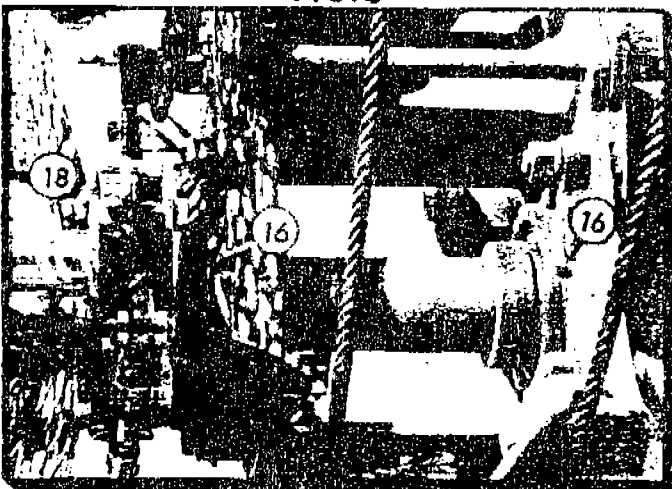


FIG. 5

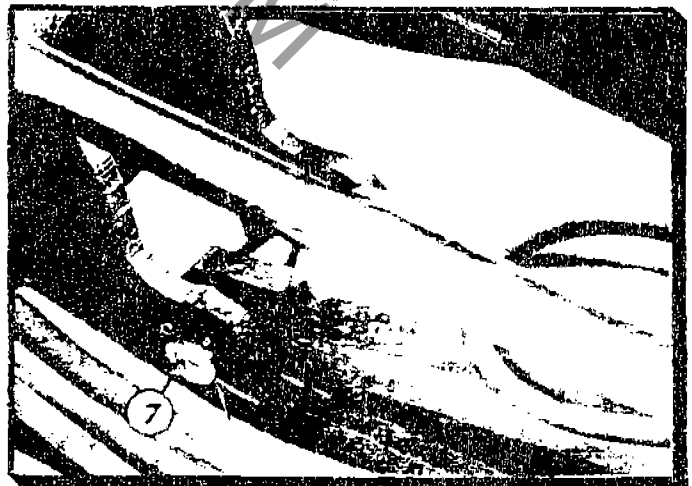


FIG. 6



## LUBRICATION INSTRUCTIONS

REF NO.	NAME OF PART	FIG.	TYPE OF BEARING	WHEN TO GREASE
1	CLUTCH BRAKE LEVER	4	BRONZE	A
2	CLUTCH LEVER	3	BRONZE	A
3	ROD ENDS	1 & 3	MONO BALL	C
4	OUTER HYD. CONTROL BEARINGS	1	BRONZE	C
5	INNER HYD. CONTROL BEARINGS	1	BRONZE	B
6	COLUMN HINGE PINS	1	HARD CHROME	B
7	LONG CYLINDER PIN	6	HARD CHROME	B
8	CABLE TENSION ADJUSTMENT	4	BRONZE	B
9	CAR BUNKER SUPPORTS	3	STEEL	B
10	SWEEP SUPPORT BEARING	3	BRONZE	B
11	COUNTERSHAFT BEARINGS	1 & 3	ANTI-FRICTION	D
12	IDLER SHEAVE BEARINGS	1	ANTI-FRICTION	D
13	DRIVE SHEAVE BEARINGS	1	ANTI-FRICTION	D
14	IDLER ARM BEARINGS	1	ANTI-FRICTION	D
15	WHEEL HUB BEARINGS	2	ANTI-FRICTION	B
16	CAR SPINDLE BEARINGS	5	ANTI-FRICTION	D
17	ENGINE CLUTCH SHAFT BEARING	3	ANTI-FRICTION	D
18	BRAKE CONTROL BEARING	5	STEEL	E

USE A MULTI-PURPOSE WATER RESISTANT GREASE WITH AN ACCEPTED EXTREME PRESURE ADDATIVE.

- (A) DAILY OR EVERY EIGHT HOURS DURING HEAVY OPERATIONS.
- (B) EVERY SET-UP
- (C) APPLY LIGHT OIL EVERY SET-UP
- (D) EVERY THREE MONTHS \*
- (E) OIL DAILY

KEEP LIGHT RINGS FREE OF ALL GREASE & FOREIGN MATERIALS.

KEEP ALL MOVING PARTS OF CAR & CONTROL STAND LUBRICATED.

\* NOTE: THE ABOVE FREQUENCY OF GREASING THE BEARINGS IS FOR AVERAGE OPERATING CONDITIONS WITH SEALS INTACT.

SEE ALLIS-CHALMERS OPERATION & MAINTENANCE MANUAL

PR-5

## PORTABLE ROCK-O-PLANE

## INSTRUCTIONS FOR MAINTAINING THE HYDRAULIC SYSTEM

1. CHECK FLUID SUPPLY LEVEL.
  - A. EACH TIME THE RIDE IS SET UP.
  - B. BRING UP TO CORRECT LEVEL APPROXIMATELY 3" TO 4" FROM TOP OF TANK WITH CYLINDERS RETRACTED WITH A TURBINE TYPE OIL WITH OXIDATION, CORROSION AND FOAM INHIBITORS.
2. CHECK FOR EXTERNAL LEAKS.
  - A. KEEP SURVEILLANCE CHECK.
3. CHANGE HYDRAULIC FLUID.
  - A. IF COLOR CHANGES (DRAIN TANK).
  - B. ONCE A YEAR DRAIN SYSTEM.
4. FILTER
  - A. CHANGE OR CLEAN EACH SEASON.
  - B. IF PRESENCE OF WATER OR EMULSIFICATION OF OIL IS NOTED COMPLETELY DRAIN AND FLUSH SYSTEM.
5. TO MINIMIZE MOISTURE ACCUMULATION BE CERTAIN OIL RESERVOIR AND CYLINDER ARE FULL DURING PERIODS OF EXTENDED STORAGE.
6. DRAINING SYSTEM
  - A. RETRACT ALL CYLINDERS.
  - B. DRAIN OIL RESERVOIR.
  - C. REPLACE FILTER.
  - D. FILL OIL RESERVOIR WITH PROPER OIL (SEE 1-B).
  - E. REMOVE THE HYDRAULIC LINE FROM THE HEAD END OF THE COLUMN LIFT CYLINDER.
  - F. EXTEND THE LIFT CYLINDER AND DISCARD THE OIL RETURNING FROM THE HEAD END.
  - G. RE-CONNECT THE HYDRAULIC LINE TO THE HEAD END OF THE CYLINDER.
  - H. RETRACT THE LIFT CYLINDER AND CYCLE SEVERAL TIMES TO ELIMINATE AIR IN THE SYSTEM.
  - I. CHECK RESERVOIR TO MAINTAIN ADEQUATE OIL.
  - J. USE THE SAME PROCEDURE FOR RIGHT HAND AND LEFT HAND MUD SILL CYLINDERS AND THE FRONT LEG CYLINDER.
  - K. IF THE SYSTEM IS TO BE FLUSHED OPERATE ALL CYLINDERS FOR 15 TO 20 MINUTES THEN REPEAT STEPS A TO J.