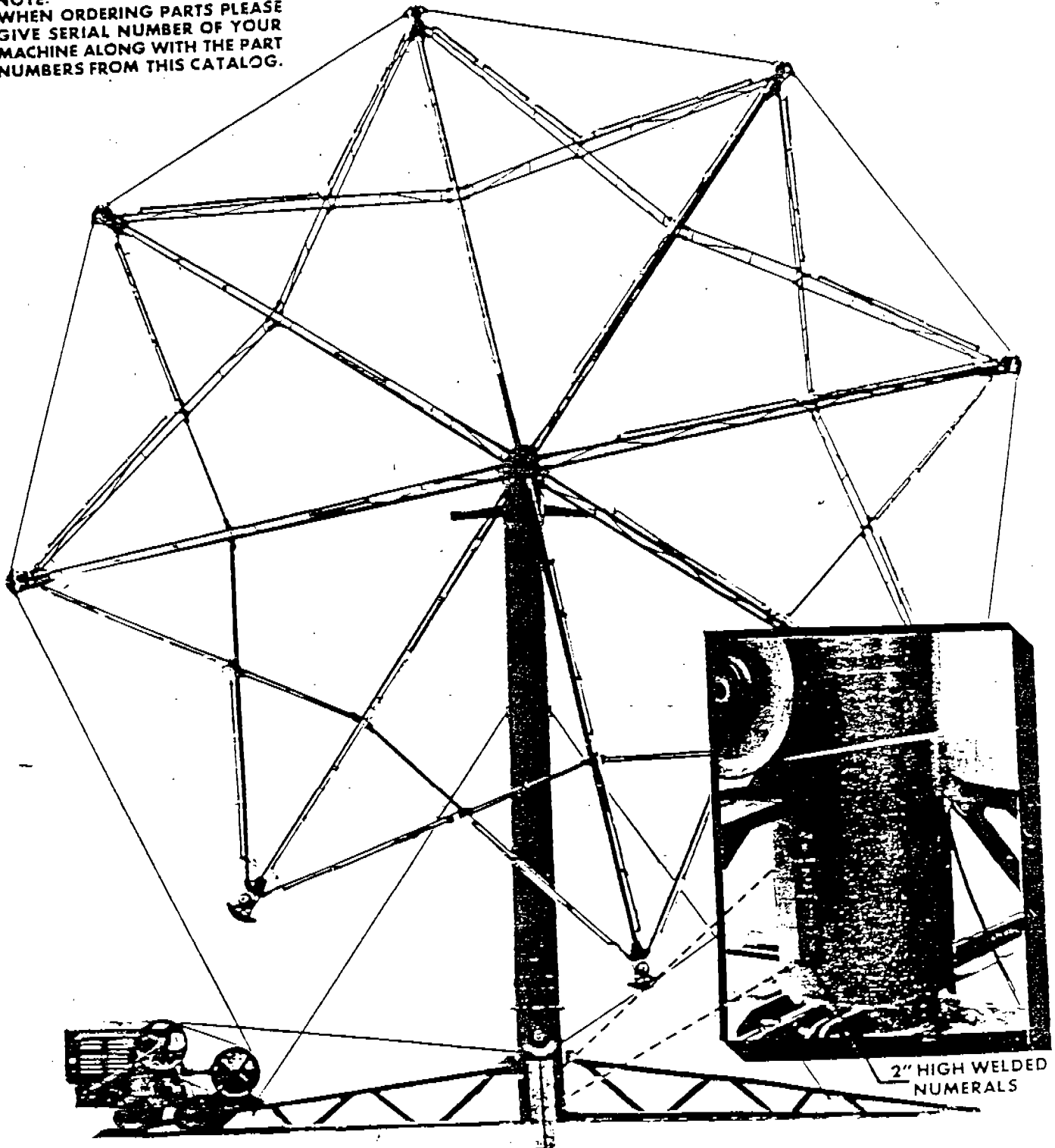




MFG: EYERLY  
NAME: ROCK-O-PLANE  
TYPE: NON-KIDDIE

## 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.



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

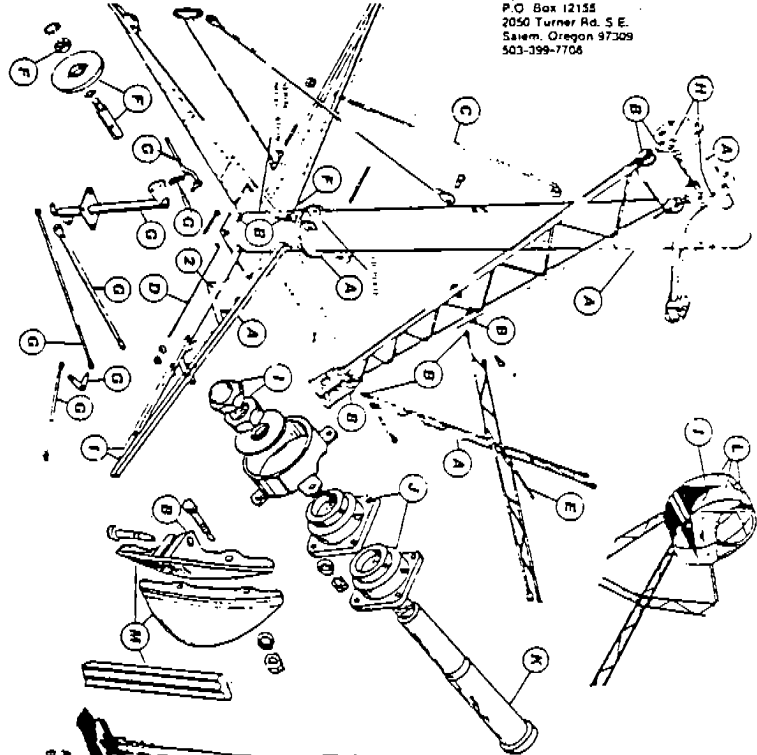
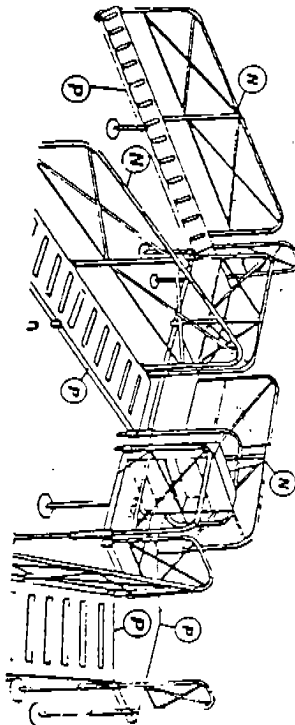




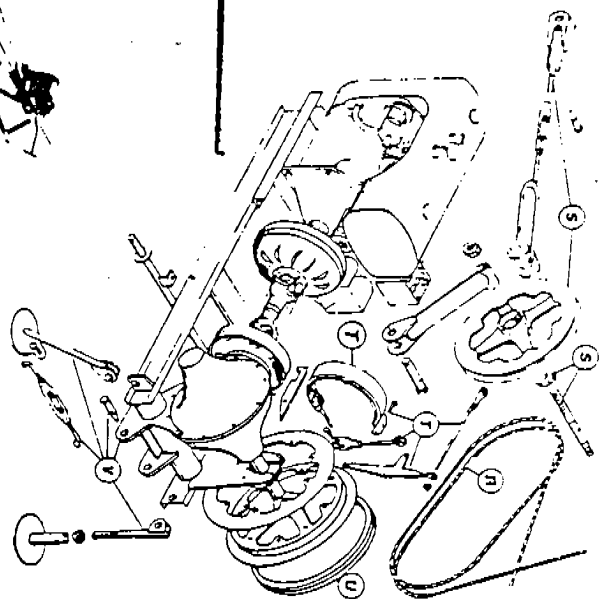
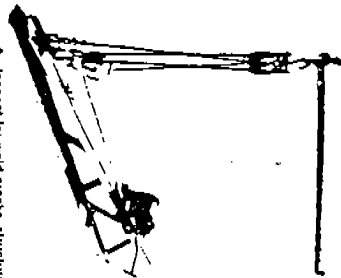
# ROCK-O-PLANE INSPECTION CHECK LIST

**SALES & SERVICE**  
Toll Free outside Oregon  
(800) 547-8156  
Evyerly Inc.  
P.O. Box 12155  
2050 Turner Rd. S.E.  
Salem, Oregon 97309  
503-399-7706

**SALES & SERVICE**  
Toll Free outside Oregon  
(800) 547-8156  
Evyerly Inc.  
P.O. Box 12155  
2050 Turner Rd. S.E.  
Salem, Oregon 97309  
503-399-7706



- A. Inspect for weld cracks, structural damage
- B. Inspect main hub, sweep attaching ears, cross brace ears, mudsill attaching holes, mudsill ears on column base and cable ears for enlargement of pin holes—repair as needed (1" holes to maximum 1-1/8", 3/4" holes to maximum 7/8", 1/2" and 1/8" oversize pins available)
- C. Replace damaged pin only with oversize pins available
- D. Inspect for proper pin fit, do not use pin with burr or sharp edges in mudsill pins as pin rotates and burr may tear out
- E. Check sway brace rods for straightness, condition of threads and head. Replace if necessary
- F. Inspect rods for damaged ends and threads. Replace if necessary, rods are to be evenly tightened
- G. Check condition of cross brace pins for enlargement, wear, missing retainers, etc.
- H. Inspect condition of column idler tube, shaft and sleeve—check for bearing play. Repair as needed
- I. Inspect control stand and linkage, latch condition, and lug on control handle, wear in bushings, linkage attaching holes enlarged, worn pins and bolts, bent linkage
- J. Check main hub for worn or defective bearing. Hub has ball bearings on both ends. Any play indicates worn or defective bearing—should be removed and inspected yearly. Recommended replacement is maximum five (5) operating seasons
- K. Inspect case for broken or worn tubes, broken screen, bent automatic return bar, lost or broken springs, enlarged attaching holes, worn bolts, safety key wearing end of bar which states down, and worn or damaged door safety key. Inspect car hub for proper spindle position. Spindle should not be flush with inner hub face. Inspect brake drum and brake band for condition. Note: inner hub is special. Always install with taper toward spindle. Lock nut must be tight



- J. Check for bearings running in housing, condition and lock collar for tightness
- K. Check timing for condition
- L. Inspect condition of door latch and hinges. Remove play and align as necessary
- M. Inspect condition of cable ears and packing
- N. Check lances for condition—repair broken members as needed
- O. Check platform for structural condition. Repair as needed. Check wood for deterioration and replace as necessary. Inspect cables and repair or replace as needed
- P. Inspect drive cable for alignment, corrosion, broken strands, oil (if lubricated, remove with approved solvent. Lubricate with pine tar)
- Q. Inspect condition of drive (after wheel) and bearings
- R. Check cable tension unit for proper operation
- S. Check brake and linkage for condition, effectiveness and operation. Replace brake lining and repair linkage as needed
- T. Check condition of drive wheel liner. If unevenly worn replace—can pull cable apart
- U. Check condition of motor base attaching holes, pins, turnbuckles and lock stands—repair or replace as necessary

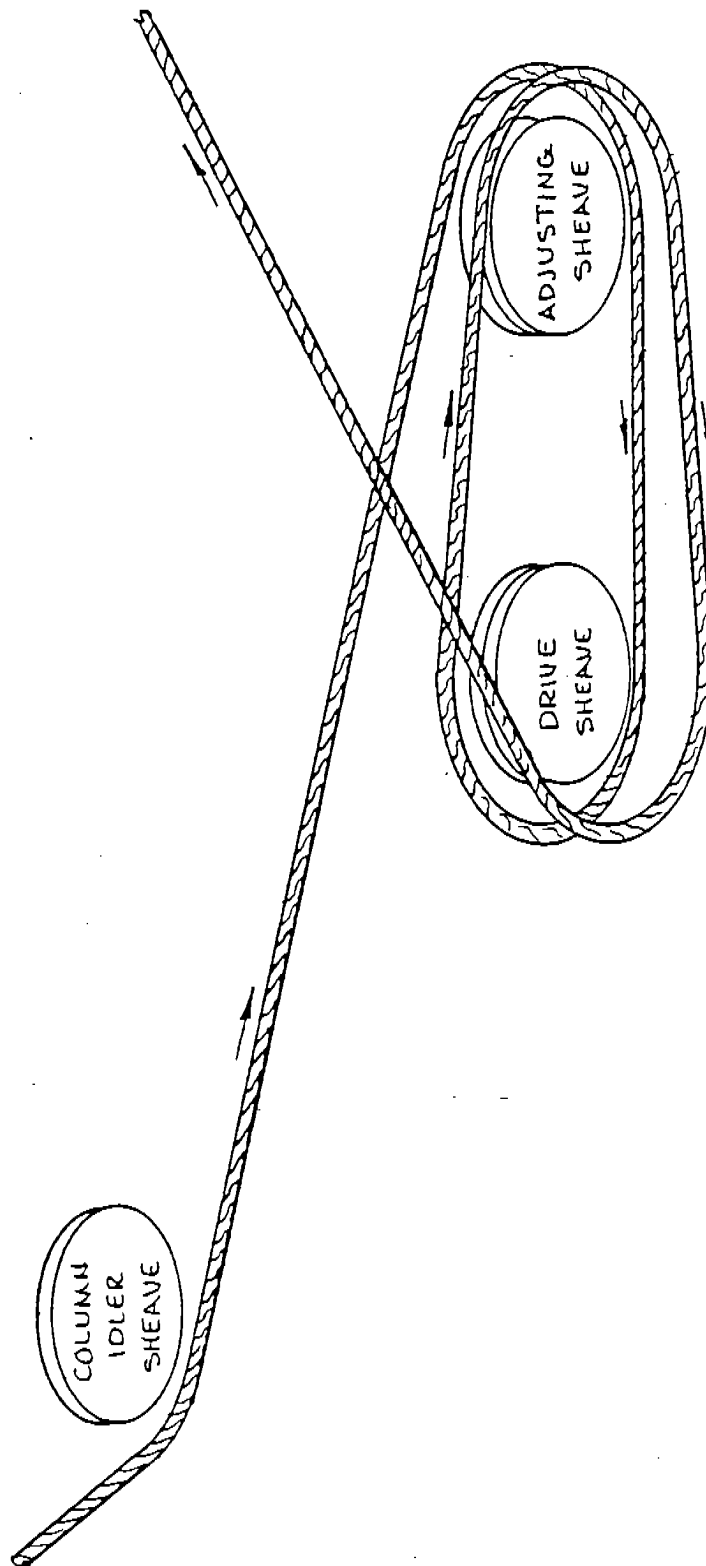
## General Information:

Maximum passenger weight per car 240 lbs. Maximum RPM is 10

## Bracing

Ride center must be floated at all times, evenly distribute weight on outer end of mudsill at area indicated by 1. Quarter bracing located at 2 should be finger tight and check often to prevent weight from transferring to quarter blocks due to settling of outer blocks. Note: Bracing should be 2 x 6 or better.





# DIAGRAM OF DRIVE CABLE WRAP

DRAWN BY: AEA	SCALE: NONE	NO. REQ'D.: ~	MATERIAL: ~
DATE: 1-25-77	NEXT ASSY.:	SOS. NO.:	SOS. BY NO.:



Drg. No. W-5-77





# INDEX

	PAGE		PAGE
SPACE REQUIREMENTS & FENCE SET-UP	1	CABLE TENSION ADJUSTING SHEAVE ASSEMBLY	33
SET-UP INSTRUCTIONS	2 & 3	WHEEL ASSEMBLY	34 & 35
LUBRICATION INSTRUCTIONS	4 & 5	CROSS BRACE ASSEMBLY	36 & 37
HYDRAULIC SYSTEM DIAGRAM	6 & 7	CABLE BINDER & MASTER LINK ASSEMBLIES	38 & 39
SIGN WIRING DIAGRAM	8	WHEEL HUB ASSEMBLY	40 & 41
WIRING DIAGRAM (Lights)	9		42
WIRING DIAGRAM (Running Lights)	10	CAR SPINDLE ASSEMBLY	43
DIAGRAM OF AIR BRAKE CONTROLS	11	CAR ASSEMBLY	44 & 45
MUD SILL & FRONT LEG HYD. CYLINDER ASSEMBLY	12 & 13	FRAME & COLUMN ASSEMBLIES	46 & 47
FRONT LEG ASSEMBLY	14	BUNKER ASSEMBLY	48 & 49
HYDRAULIC LIFT CYLINDER ASSEMBLY	15	SPRING SUSPENSION & TIRE ASSEMBLY	50 & 51
HYDRAULIC PUMP ASSEMBLY	16 & 17	STANDARD AXLE & BRAKE ASSEMBLY	52 & 53
HYDRAULIC OIL FILTER ASSEMBLY	18	AIR CHAMBER ASSEMBLY	54
TRIPLE VALVE CONTROL ASSEMBLY	19	MUD SILL ASSEMBLY	55
TRIPLE VALVE ASSEMBLY	20 & 21	CONTROL STAND ASSEMBLY	56 & 57
FRONT LEG CONTROL VALVE ASSEMBLY	22 & 23		58
THROTTLE CONTROL ASSEMBLY	24	LOADING PLATFORM & FENCE ASSEMBLY	59
CLUTCH SHAFT ASSEMBLY	25	LIGHT RING ASSEMBLY	60 & 61
HYDRO-SHEAVE ASSEMBLY	26	SIGN SUPPORT ASSEMBLY	62
SPRING LOADED IDLER SHEAVE ASSEMBLY	27	SIGN ASSEMBLY	63
BRAKE CONTROL ASSEMBLY	28 & 29	FLUORESCENT FIXTURES	64
DRIVE SHEAVE ASSEMBLY	30 & 31	FLUORESCENT FIXTURES COMPONENTS	65
CABLE ADJUSTING SHEAVE ASSEMBLY	32	TICKET BOOTH ASSEMBLY	66



MANUFACTURERS OF AMUSEMENT RIDES

TELEPHONE  
399-7709  
AREA CODE 503

CABLE ADDRESS  
EYERLYRIDE SALEM



LEE U. EYERLY  
1892-1963

JACK V. EYERLY  
PRESIDENT

P. O. Box 12441

SALEM, OREGON 97309

RE: Door Modification Bulletin  
Eyerly ROLL-O-PLANE, ROCK-O-PLANE,  
FLY-O-PLANE and LOOP-O-PLANE amuse-  
ment rides, all models and production  
series. Drawing L-8-78

Gentlemen:

Enclosed is Drawing L-8-78, pertaining to a  
recommended door modification to the rides indicated  
above.

The modification to the door is hereby re-  
commended and approved providing the instructions  
shown on this drawing are followed.

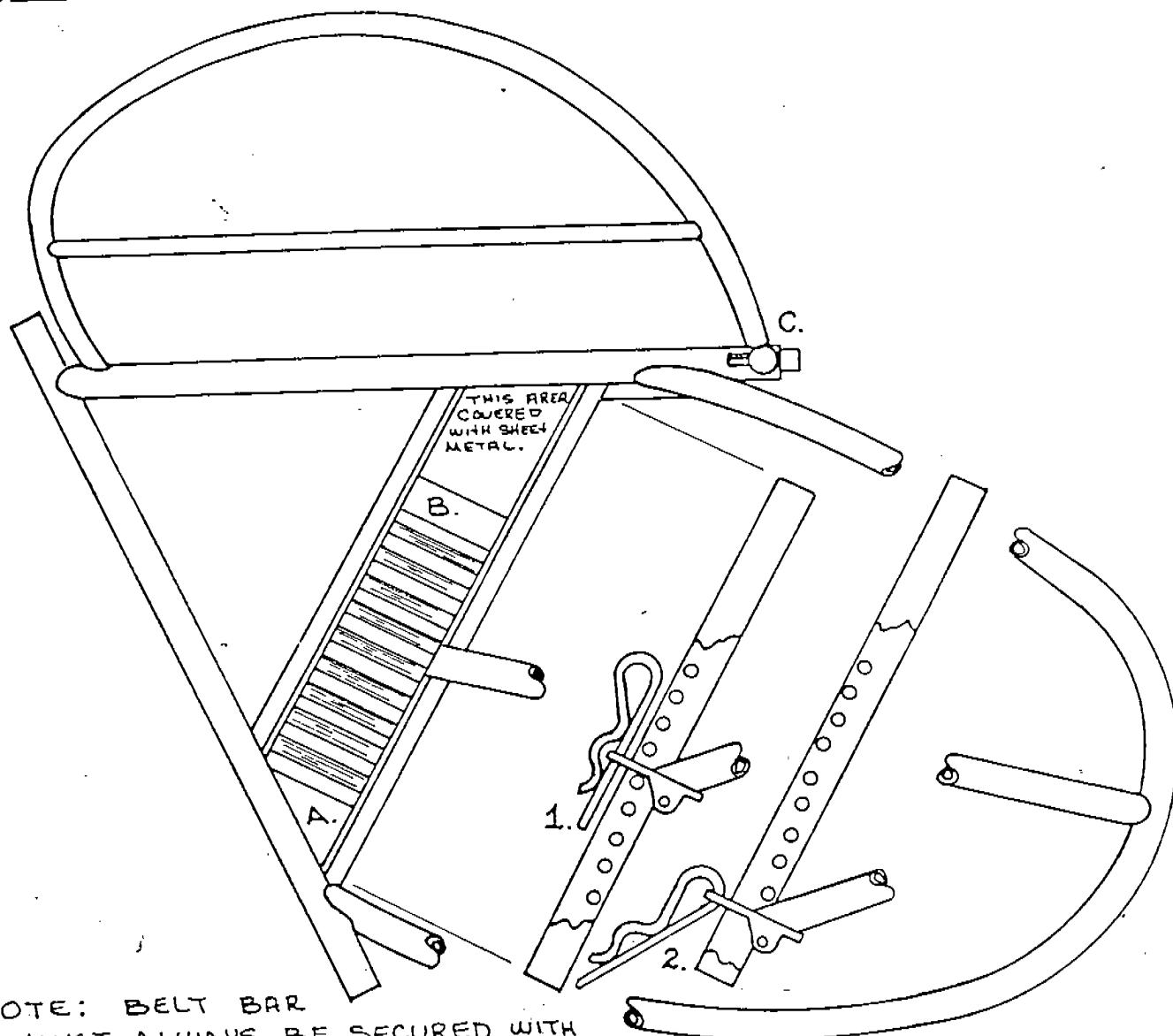
Sincerely,

EYERLY AIRCRAFT COMPANY

*Jon V. Eyerly*  
Jon V. Eyerly  
Vice President

Enc.





NOTE: BELT BAR MUST ALWAYS BE SECURED WITH BELT TAUT OVER PASSENGERS BETWEEN UPPER AND LOWER DOOR LADDER RUNGS. SPRING SAFETY KEY MUST BE RETAINED AT FIRST DETENT (FIG. 1.). IF BELT BAR IS IMPROPERLY SECURED BELOW BOTTOM RUNG (POINT A) 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 NEAREST LADDER RUNG. ATTACH BY WELDING.

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

#### DOOR MODIFICATION BULLETIN

DRAWN BY: AEL	SCALE: NONE	NO. REQ'D.: ~	MATERIAL: ~
DATE: 4-6-78	NEXT ASSY.: ~	SOS. NO.:	SDD BY NO.:

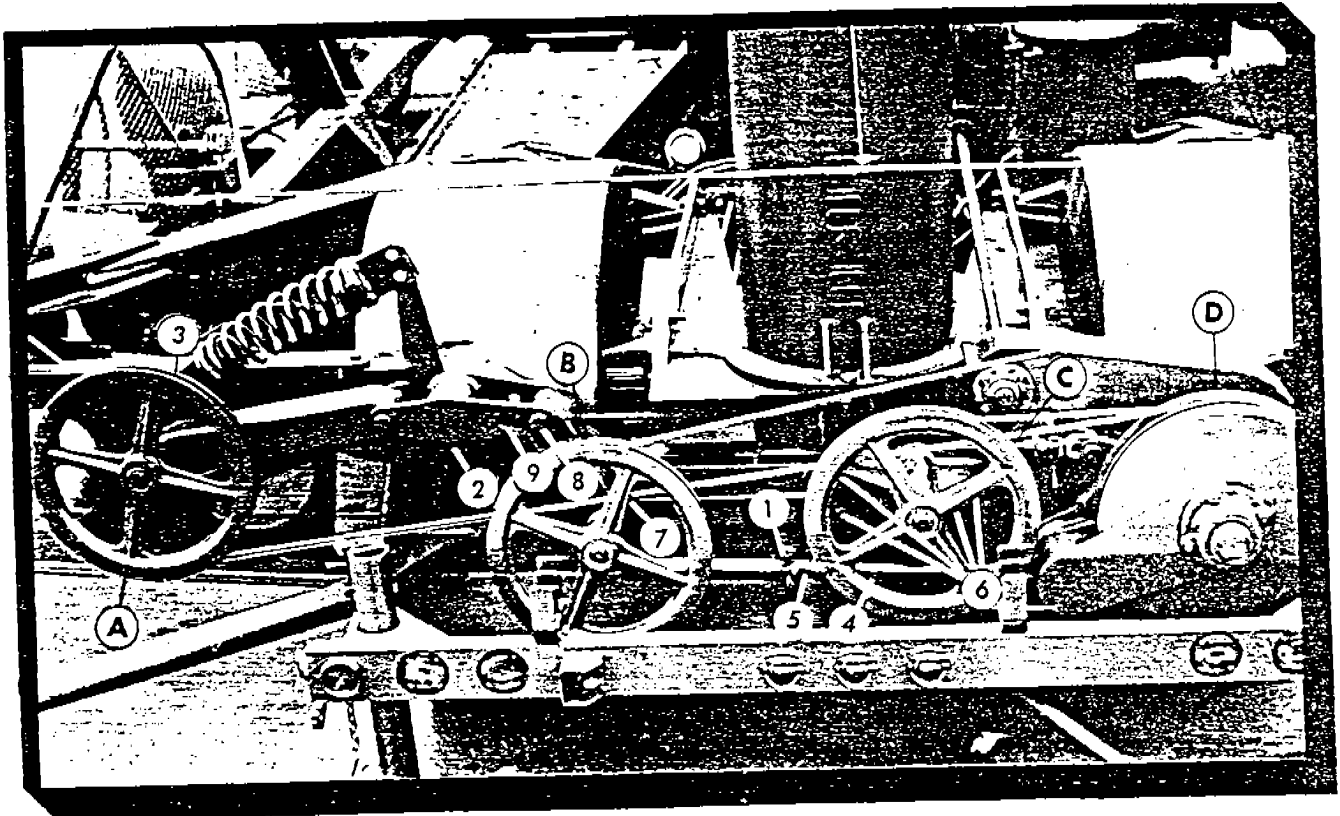


Drg. No. L-8-78





## 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 Stops, 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 Shieve (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.

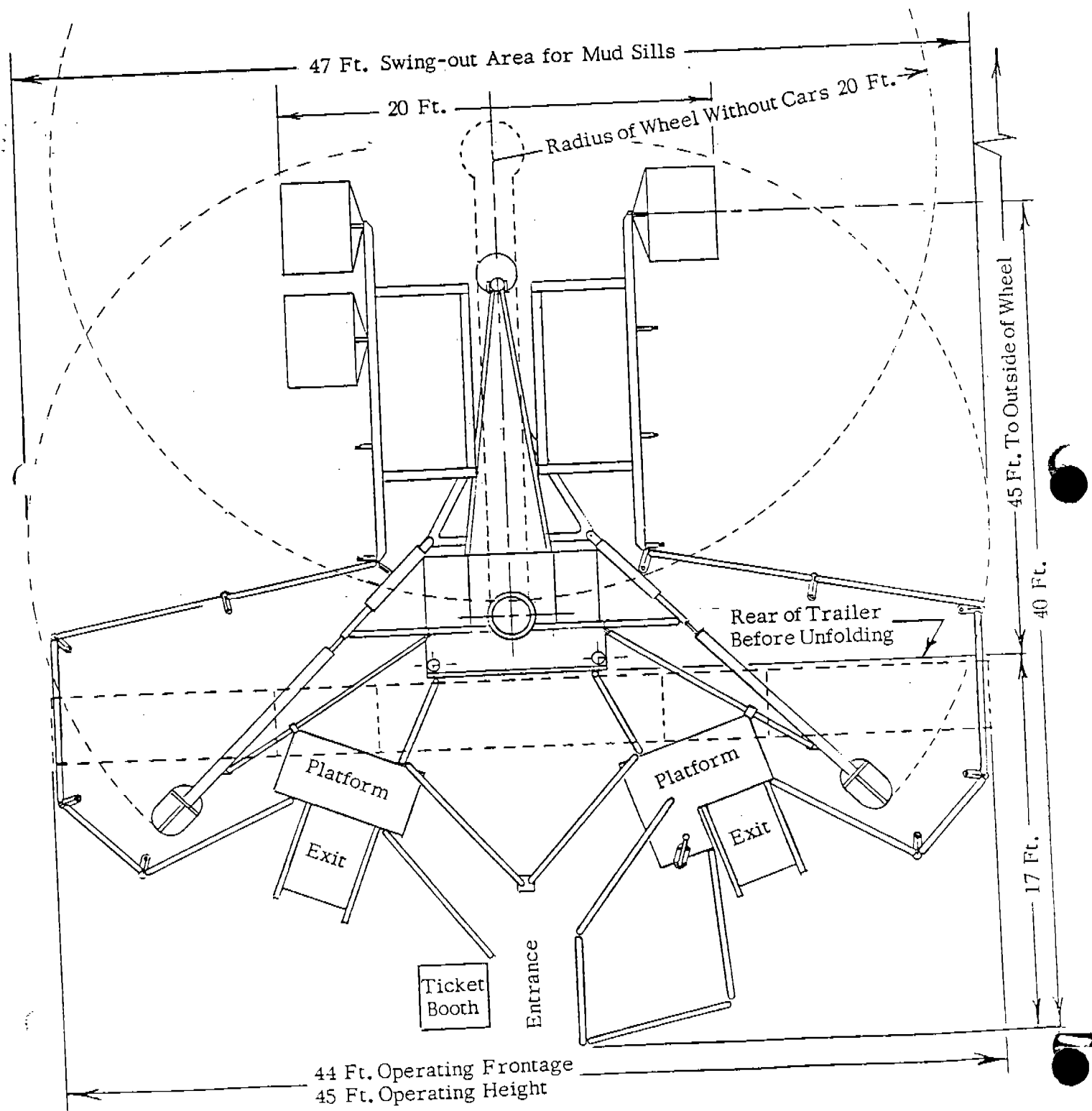
6. A third adjustment can be made under extreme conditions. All previous adjustments should be returned to their original positions. Remove Bolt (8) and install at (9) then follow procedures as outlined in No. 3 through No. 5.

**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.**



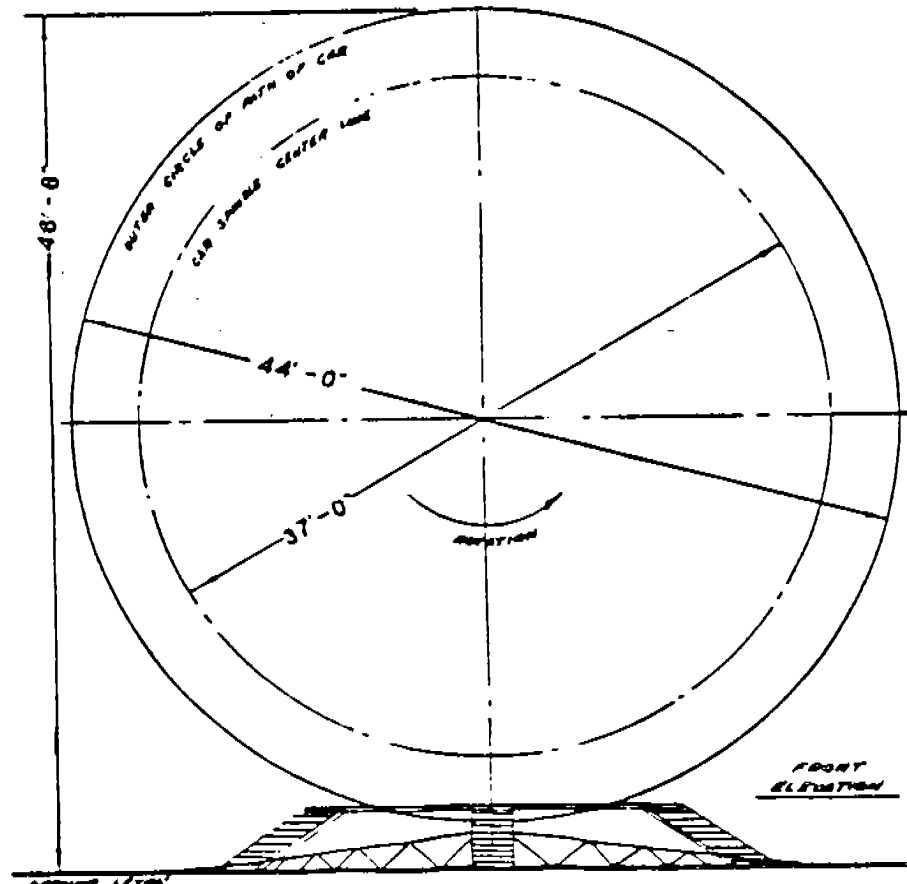
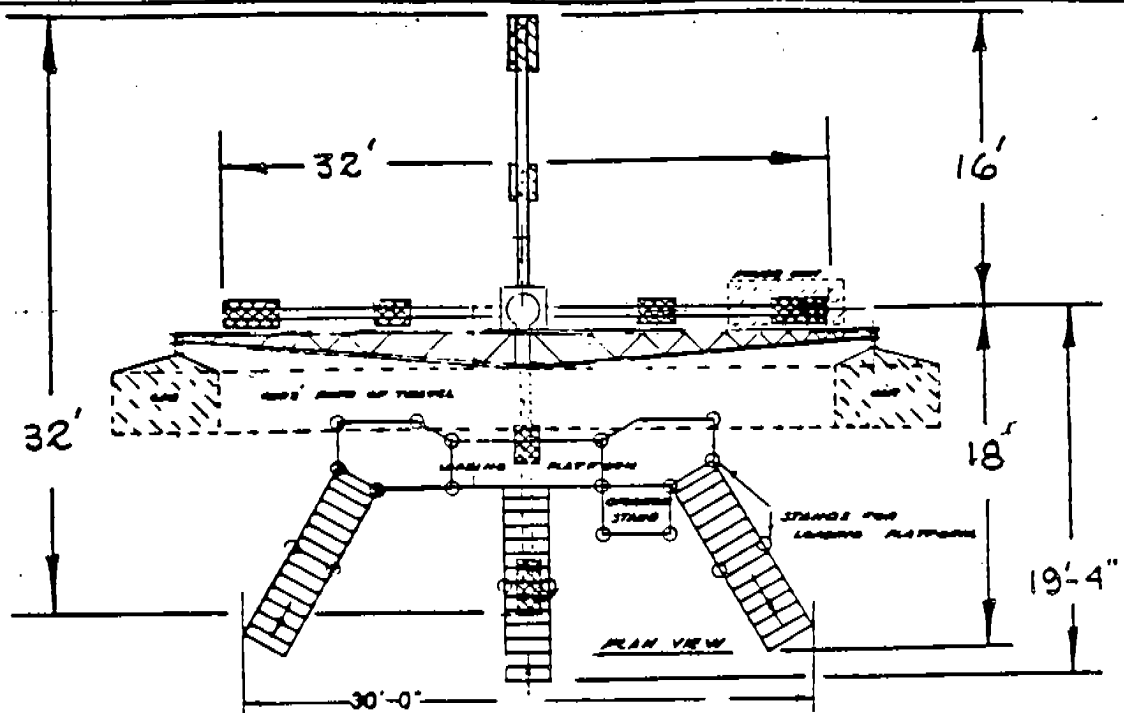


# PORTABLE ROCK-O-PLANE SPACE REQUIREMENTS & FENCE SET-UP





## ROCK-O-PLANE GROUND PLAN

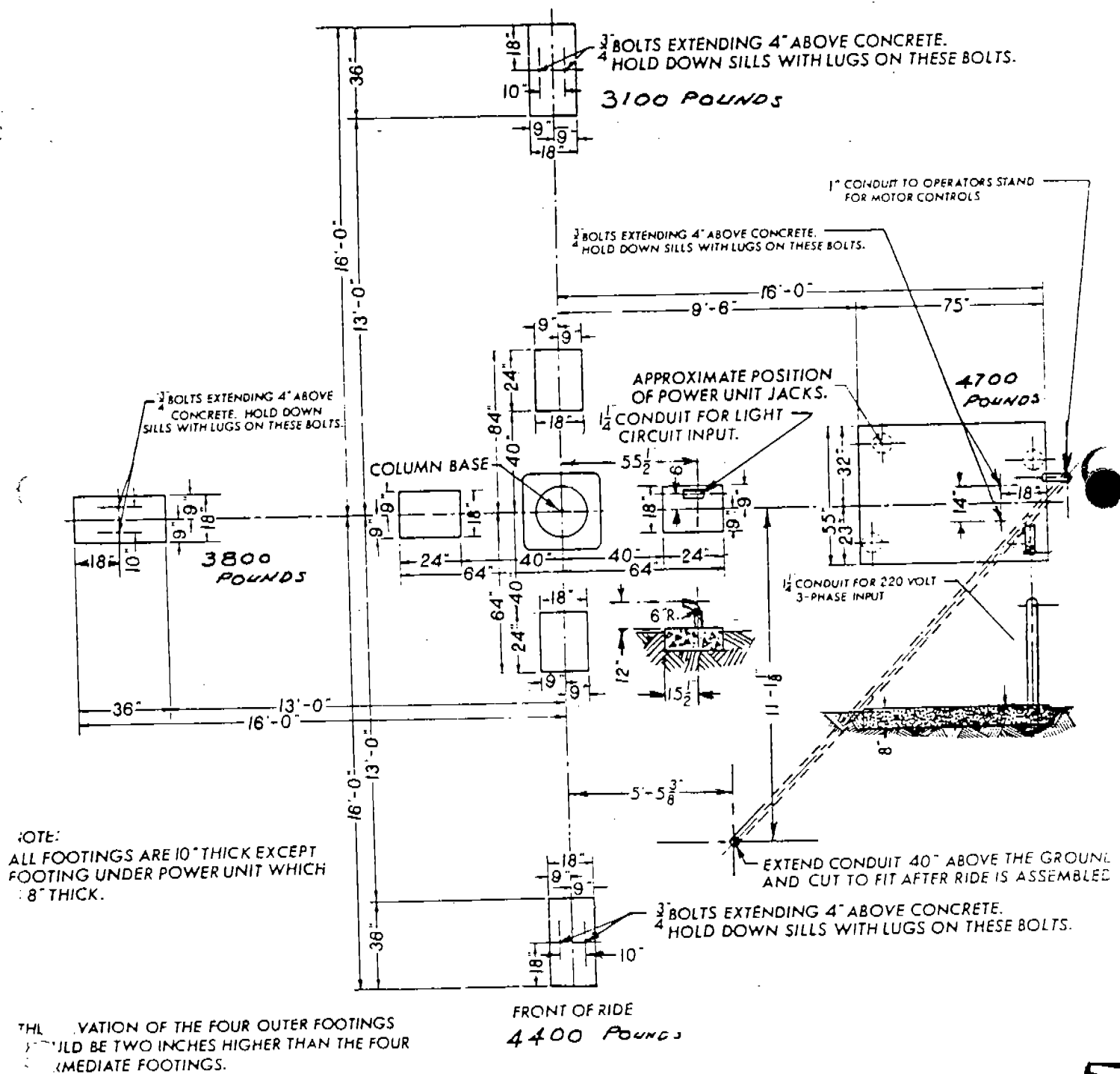


### ROCKOFLANE SET-UP DIMENSIONS

*Eyerly Aircraft Co.*

SALEM, OREGON

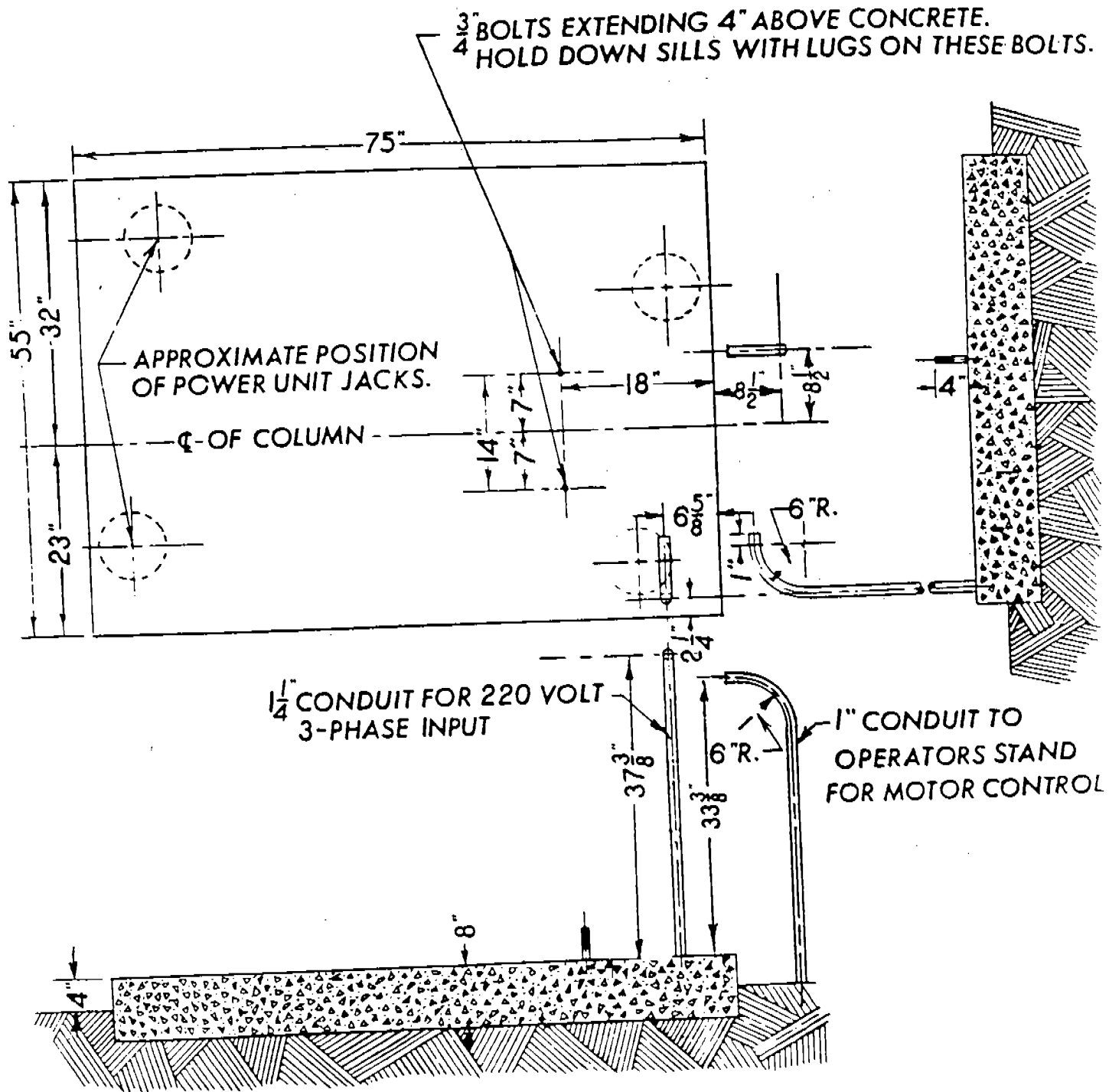








# DETAIL OF FOOTING UNDER ROCK-O-PLANE POWER UNIT







# PORTABLE ROCK-O-PLANE SET-UP INSTRUCTIONS

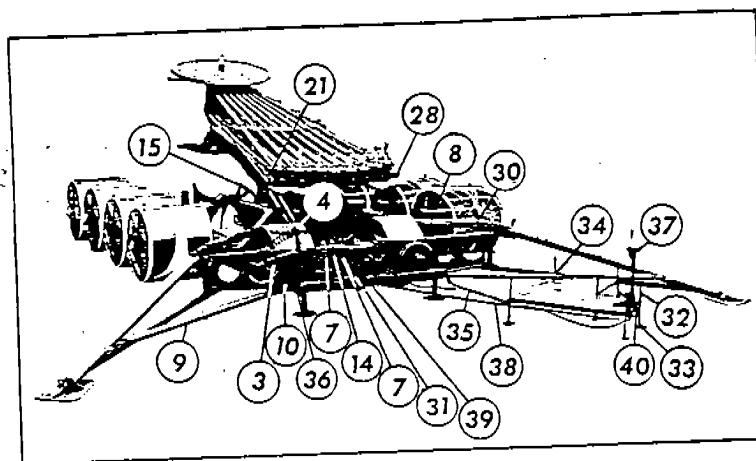


FIG. 1

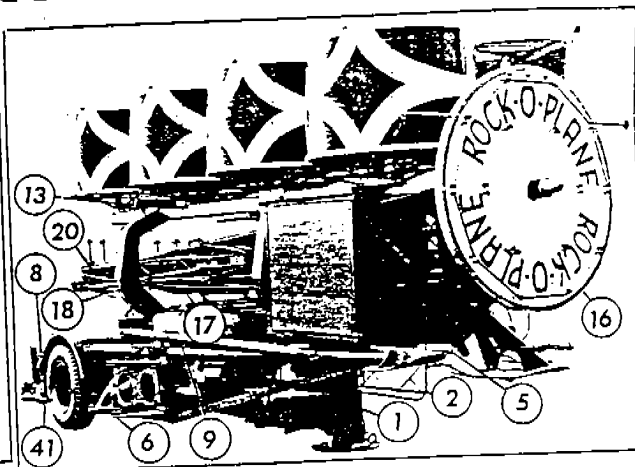


FIG. 3

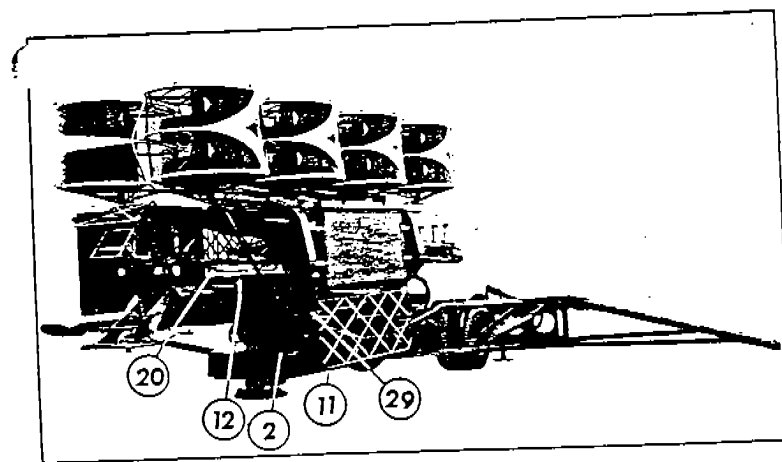


FIG. 2

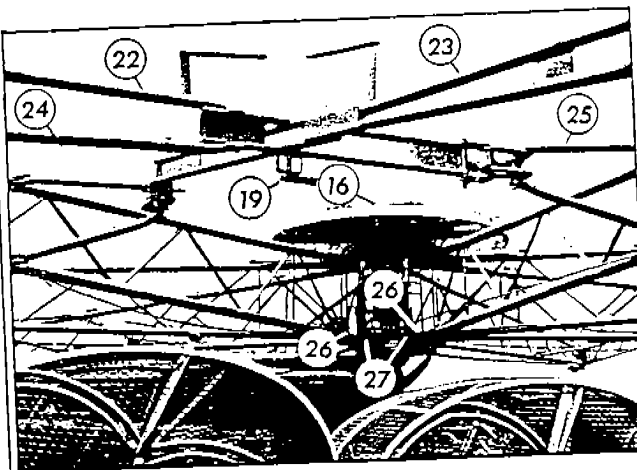


FIG. 4

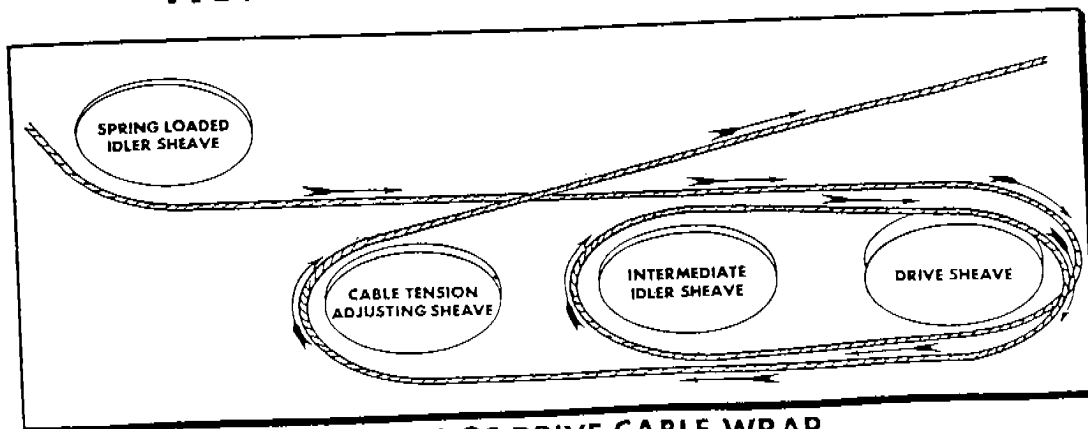


DIAGRAM OF DRIVE CABLE WRAP





## PORTABLE ROCK-O-PLANE SET-UP INSTRUCTIONS

- (1) Place ride on desired location according to set-up and ground plan.
- (2) Remove splash board by removing the two safety pins from the upper right and left corners and from the attachment at the bottom which is secured to the front leveling cylinder (1) Fig. 3. CAUTION: BE SURE VALVE CONTROL LEVERS ARE IN NEUTRAL POSITION.
- (3) Check to see that the pump belt is on and then start engine.
- (4) Move front valve lever (2) Fig. 2 & 3 down to raise front of ride and remove truck. You are now ready to assemble the ride.
- (5) Remove 3/4" pin and fold down cable idler arm with spring (3) Fig. 1 which is located on rear left side. Secure in operating position by pinning spring bracket to idler arm bracket (4) Fig. 1 with two 3/4" pins.
- (6) To assemble the two rear sills, remove safety chain (5) Fig. 3 and small hair pins, located on each side of fifth wheel, and remove gate transport pins (6) Fig. 3, located on each side about 3 feet in front of rear wheels. Pull gates out to about a 60 degree angle. By moving outer rear hydraulic levers (7) Fig. 1 forward, raise sills from transporting pin and swing them around until gate ears line up with ears (8) Fig. 3 on back of ride. Pin and secure. Remove mud sill brace tube (9) Fig. 1 & 3 from transport position and place in slotted ear (10) Fig. 1 located at lower gate ear. Place chain attached wedge in slot just behind slotted ear. CAUTION: DO NOT DRIVE WEDGE INTO SLOT UNTIL RIDE HAS BEEN LEVELED.
- (7) Remove fence sections (11) Fig. 2 from transport position and stack about 15 Ft. from ride. Remove platforms, platform ramps and ramp fence from back of ride and remove all parts, loose tools and other objects from inside of column.
- (8) At this stage, the cars may be lowered, provided all obstacles which damage the cars as they are lowered, have been removed from the area. Remove the column pin located on top of front leveling cylinder. Next, remove the two 3/4" pins (12) Fig. 2 attaching the bunkers to the column. Located on the engine side, between the two rear cars, is the over-center bunker lock (13) Fig. 3. Remove the safety pin and use the pipe lever supplied to pull handle out and up until lock is out of the slot in the middle. NOTE: MAKE SURE HANDLE STAYS IN UPRIGHT POSITION OR IT WILL RELOCK. Raise the column very slowly by depressing the center rear valve lever (14) Fig. 1 to lower the cars. When the cars reach the lowest position and stop, raise the column another six inches. Located behind the front leveling cylinder is the car bunker raising linkage (15) Fig. 1 To release this linkage, remove the two 1" pins and let it hang loose between the base channels. Lower the column back to the base.
- (9) In order to make the wheel assembly easier, you should level the sweeps both lengthways and sideways. To do this, raise the rear sills and lower the front leveling cylinder (1) Fig. 3. CAUTION: BE VERY CAREFUL AND WATCH THE FRONT CARS AS THEY CAN HIT THE GROUND. After you have leveled the sweeps, raise the sign (16) Fig. 3 & 4 into operating position.
- (10) To fold out the sweeps, you must first fold down the sweep transporting support (17) Fig. 3. To do this, remove the 3/4" pin, located on the column just above the left rear bunker support. Place the pipe lever on angled shaft, located at end of sweep support, and pull up. CAUTION: BE SURE SOMEONE IS HOLDING ON TO THE SWEEPS AS THEY MIGHT SWING. Be sure sweep support folds down to column. You now remove the come-a-long (18) Fig. 3, which is hooked to the bottom side of the sweeps. CAUTION: THE OVER-CENTER CAR BUNKER LOCK (13) Fig. 3 MUST BE IN LOCKED POSITION BEFORE FOLDING OUT THE SWEEPS. Swing the right and left outer sweeps out at the same time, being careful that the weight is equal on both sides at all times. Pull the sweeps around until the wheel is formed. Located at the center of each cross brace is a spring loaded pin (19) Fig. 4 with a lever. Line up the holes in the cross braces until the spring loaded pin can be inserted by folding the lever sideways. To assemble the master cross brace, you must first remove the rim safety cable (20) Fig. 2 from the transporting position and hook it into the eye (21) Fig. 1 at the end of the outer sweep. DO NOT SECURE AS IT WILL STRETCH THE CABLE. Now take the two long outer cross braces (22 & 23) Fig. 4 and place narrow one (23) through the wide one (22) until the pin holes line up. DO NOT SECURE SPRING LOADED PIN. Next, take the two short inner braces (24 & 25) Fig. 4 which have over-center locks on them and pin to each of the long outer braces. By using the pipe lever, pry the locks over center and insert safety pins. Remove the two cables (26) Fig. 4 attached to the inner end of outer sweeps, cross them and secure to the two hooks (27) Fig. 4 protruding from bottom center hub plate. The rim safety cable can now be secured.
- (11) You are now ready to level the ride for operation. You do this by levels located by the front leveling cylinder valve (2) Fig. 2 & 3 and by the cluster of three hydraulic levers (14 & 7) Fig. 1 in the back. The base should be raised high enough so there is no weight resting on the axle spring. The rear wheels need not be off the ground to do this.
- (12) Remove the cable shoes (28) Fig. 1 from the storage bin under the column base plate and pin to the sweeps. Make sure that all loose tools and other objects are removed from the fifth wheel plate and from the column. The mud sill safety chain (5) Fig. 3 should be put through the hole in the middle of the fifth wheel support plate and the caps connected to the air brake lines.
- (13) After checking for any overhead obstructions, such as power lines, overhead lights, etc., raise the column to a vertical position and secure to base plate with the 1" bolt supplied. Place sway brace hooks in slots (29) Fig. 2 in sides of column and secure sway brace rods to brackets (30) Fig. 1 on top of small mud sill gates.
- (14) To install drive cable, loop the cable over one cable shoe and secure in place with a piece of rope or wire. Then rotate the wheel and guide one side of the cable into the shoes while guiding the other side past the front of the wheel. The cable must be wrapped onto the drive as shown by the illustration. Tighten the cable until the slack is removed by unscrewing the tension member (31) Fig. 1 which extends from the drive wheel bracket to the inner left idler arm. The tension is adjusted properly when the spring plunger moves back and forth approximately five eighths of an inch while operating. Excessive tension is unnecessary and shortens the life of the cable. Never use any kind of mineral oil to lubricate the cable as this causes a rapid deterioration of the rubber in the cable shoes and the drive liner.
- (15) Remove all platform adjuster tubes (32) Fig. 1 and feet (33) Fig. 1 from belly pan in the middle of the base and place at back of ride. By using one of the adjuster tubes, locate the platforms so the corners will attach to the mud sill brace tubes in the hole (34) Fig. 1 provided. Place all other adjuster tubes with bases in holes provided on platform. Place platform spacer bars (35) Fig. 1 in hooks (36) Fig. 1 at each end of bumper by holding in a vertical position with the welded pin down. Then fold down and pin to platform and secure. Level platforms at same level where they hook to mud sill brace tubes. Remove control stand (37) Fig. 1 from belly pan, place in position on platform and secure with two 3/4" pins. Attach control rod (38) Fig. 1 to bottom lever of control stand and to bell cranks (39) Fig. 1 located in rear pan. Connect emergency brake cable (40) Fig. 1 to bell crank (41) Fig. 3 under right side of rear pan.
- (16) Install the cars on the spindles. Secure in place with the large washer, followed by the thick nut and lock with the chrome cap nut.
- (17) Set up fence and ticket booth according to the diagram.
- (18) Remove the belt from the hydraulic pump and hang on the clips provided on the bunker support.
- (19) Before operating, check all pins for safeties.





## ROCK-O-PLANE ASSEMBLY INSTRUCTIONS

**LOCATING THE COLUMN BASE:** Move the column toward the rear of the truck until the rear dolly is near the edge of the truck bed. Remove the bolts from the column joint allowing the base to swing down to the ground. If the base still clears the ground, then the column may be rolled back until the rear dolly wheel drops off the truck.

**INSTALLING THE MUD SILLS:** When facing the wheel on the front side, the heavy mud sill belongs on front. The one with the fittings for the power unit goes on the right hand side. The two identical sills belong on the rear and left hand side of the column. Use the one inch taper point pins for attaching the sills to the column. A special long pin is provided for the bottom of the front mud sill. After attaching the sills, block them up until the column is in a vertical position with most of the weight on the blocks at the outer end of the sills. Additional blocks should be located at about the center of each mud sill.

**LOCATING THE POWER UNIT:** Back the power unit onto the right hand sill until the pins can be driven through the ears connecting the motor frame to the mud sill. To avoid having to jack the frame until it is level, a plank can be laid on the mud sill to form a ramp for the front wheel. Four adjustable legs are provided for supporting the power unit and there are four turnbuckles for anchoring it to the mud sill.

**ASSEMBLING THE WHEEL:** The wheel sweeps are held in place by the same type of drive pins as are used on the mud sills. When two sweeps have been attached, a pair of X-braces may be pinned between them with the 3/4 inch taper point pin. To check on the correct position of the X-braces, see that the light stringer clips are on the top or face side of the wheel. The adjustable X-braces should be installed last and any slack is taken up with the turnbuckles which are a part of these braces.

**INSTALLING THE LIGHT STRINGERS AND SIGN:** By pushing on the end of the bolt in the light stringers, the spring can be compressed allowing the bolt head and washer to slide under the clip provided on the wheel sweeps and braces. The six foot stringers belong on the outer end of the sweeps and on the X-braces with the eight foot stringers next to the sign on the sweep. With the sign unfolded, lay it back side down on the center of the wheel with each bracket on the back side directly above a sweep. With the finger clamp straddling the pipe, hook the tips into the hole in the sign bracket and tighten the bolt.

**RAISING THE WHEEL:** A power winch with the aid of two double and a single block is the best method of raising the wheel; but a hand winch will do the job. (See the sketch showing details for the block and rope arrangement.) The gin pole made of four inch pipe is attached to the column just above the flanged coupling and is held in a vertical position by a 7/8 inch rod bolted or pinned at the other end to an ear provided on the column. The hydraulic jack at the base of the column is primarily for tipping the column back when the wheel is being lowered. It can also be used to let the wheel drop into place gently as the column reaches the upright position when it is being raised. To do this, the jack should be extended about five inches above the edge of the column before raising, then, by operating the control valve, the column can be eased gently into the upright position; however, this requires extreme caution in operating the valve.

## OPERATING THE ROCK-O-PLANE

To start the gasoline engine, press the button on the control stand. The button with the guard is for starting and the other is for stopping the engine.

All that is necessary for starting the ride is to release the brake lever. The wheel should be operated at not more than nine revolutions per minute. The governor on the motor is adjusted at the factory for the proper speed. One of the reasons for installing the starter on the ride is to make it convenient to stop the motor rather than let it idle for a long period of time. This, besides being a saving on fuel eliminates any overheating of the hydraulic coupling; however, it is not necessary to stop the motor when loading the cars. Idling speed of the engine should be kept as low as possible.

**INSTALLING THE BRACES ON THE COLUMN:** Three rods are provided to hook into the three keyholes on the sides and rear of the column and to slip through holes in the side and rear mud sills. Secure in place by tightening nuts on the lower end of these rods.

**SETTING UP THE LOADING PLATFORM:** The loading platform consists of two elevated end sections with a connected cat-walk and a ramp up to each of these three sections. A T-shaped member with a base plate is provided for bolting to the front mud sill and supporting the center portion of the platform which is supported on the end by legs to the ground. These legs are adjustable by means of a short piece of pipe which slips over the upper end of the leg and is attached to the platform by rail post which extends through a tube of the platform into the adjusting pipe. Hook the end sections to the center section and support at the outer end with legs. The ramps are hooked to the platform and supported in the center with short adjustable legs. The tie rod is bolted to the right hand mud sill and to the base of the control stand.

**INSTALLING THE CONTROLS:** Bolt the control stand to the operator's platform with the brake handle pointing toward the front when it is engaged in the ratchet. Plug the small cord from the motor into the receptacle at the base of the control stand. Connect the long brake rod from the bell crank on the mud sill to the control stand and the short one to the brake lever on the motor.

**INSTALLING THE DRIVE CABLE SHOES:** The drive cable shoes are attached to the ends of the sweeps by slipping the pins into the holes provided in the sweep and at the same time lifting them up where the taper pin can be driven in holding them in place.

**PUTTING ON THE DRIVE CABLE:** Loop the cable over the cable shoe and secure in place with a piece of rope or wire, rotate the wheel and guide one side of the loop into the shoes while the other side swings past the front of the wheel. The cable must be wrapped onto the drive wheel as shown by the illustration. Tighten the cable only tight enough to remove the slack. While the machine is running, sufficient cable tension can be obtained by tightening the turnbuckle by hand without the aid of any tools provided the threads are clean and lubricated. Excessive tension is unnecessary and shortens the life of the cable. Never use any kind of mineral oil to lubricate the cable as this causes a rapid deterioration of the rubber shoes and liners.

**INSERTING THE CAR SPINDLES:** Slide the car spindles in bearings on the ends of the sweeps from the inside and lock the set screws in the bearings.

**PUTTING ON THE CARS:** By leaving the outside rail off the exit ramps, the cars can be carried up and slid onto the spindles by two men. Secure in place with the large washer followed by the thick nut, and lock with the cap nut.

Some operators may find it more convenient to assemble the Rock-O-Plane in a different order than described in the preceding text; for instance, those with limited lifting power may find it better to assemble the wheel after the column has been raised. The hoisting of the sweeps and the X-braces can be done by throwing a rope over the wheel hub and using a hoisting drum or "migger-head" on the power unit. A block and tackle or a truck can be used for rotating the wheel as it is being assembled.

**TO AVOID OVERHEATING OF THE FLUID COUPLINGS.**

To operate the electric model, the switch on the control stand is turned to the "automatic" position which brings the switch on the brake lever into operation. The ride can now be fully controlled by the brake lever. In an emergency, the ride can be operated with the control stand switch.

The safety belts in the cars should be left slack enough to clear the bar about two inches when pulled toward the bar at the center. A safety clip is provided for inserting in the haap in the end of the safety bar to insure against the door coming open when the ride is in operation.

## LUBRICATION

All moving joints and sliding parts of the safety bar and its tie rod should be kept oiled. All bearings on the Rock-O-Plane are of the anti-friction type with adequate seals provided. Lubricating these bearings with a grease gun loaded with ball bearing grease every one hundred hours of operating should be sufficient. The hydraulic coupling or fluid drive unit should have its oil level maintained at a point where it will operate with an unbalanced load and will also idle without excessive drag. This unit requires special oil which may be obtained at any garage handling Chrysler products. If any leak

should appear in this unit, it should be taken to one of these garages for maintenance as it requires special tools to replace the seal.

Read your instruction book for the Allis-Chalmers power unit for lubrication and maintenance information.

Do not lubricate the drive cable with any kind of mineral oil as this causes rapid deterioration of the rubber shoes and drive wheel liners.





# LUBRICATION INSTRUCTIONS

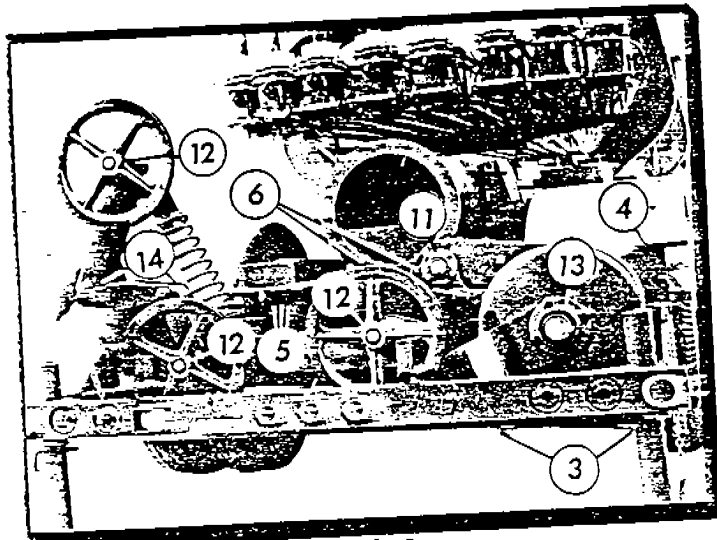


FIG. 1

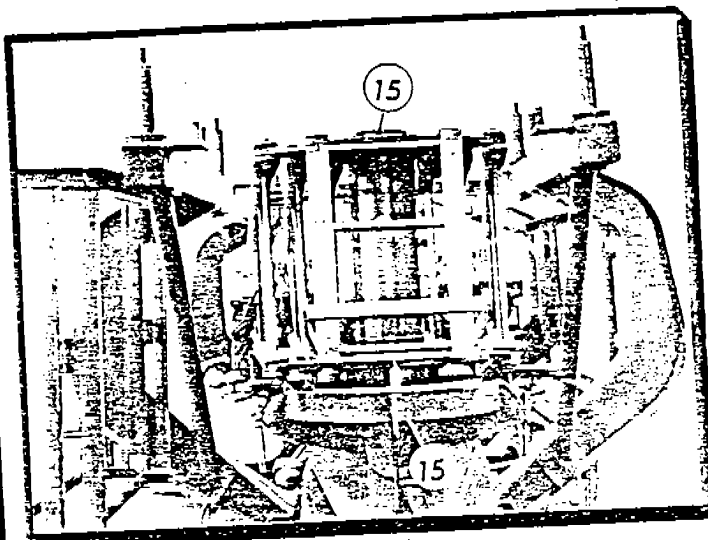


FIG. 2

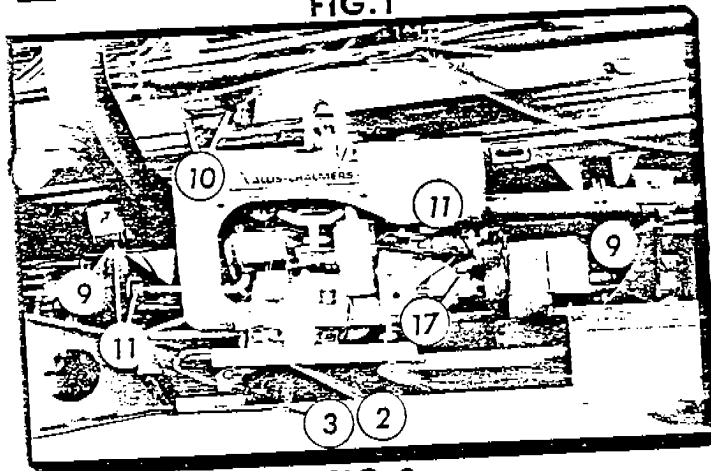


FIG. 3

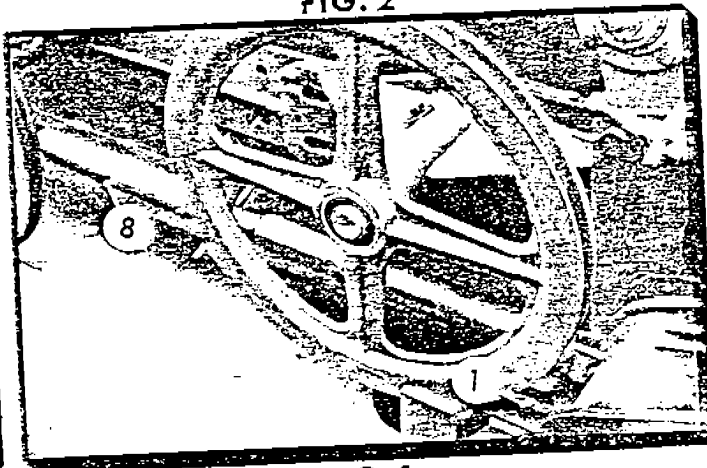


FIG. 4

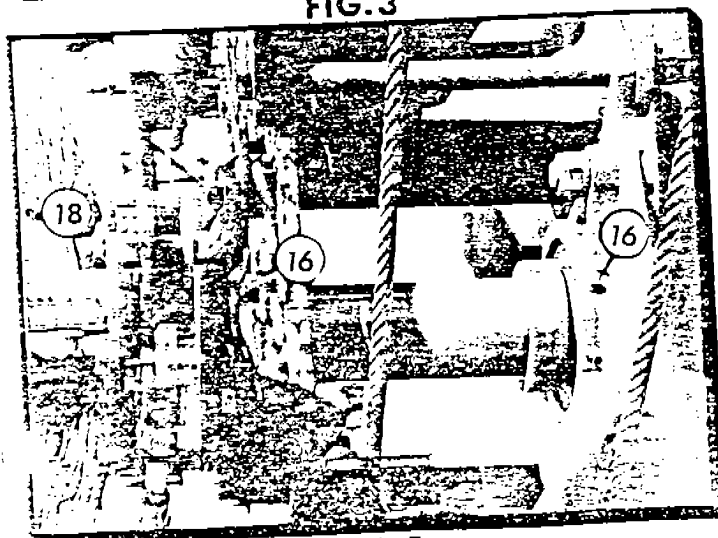


FIG. 5

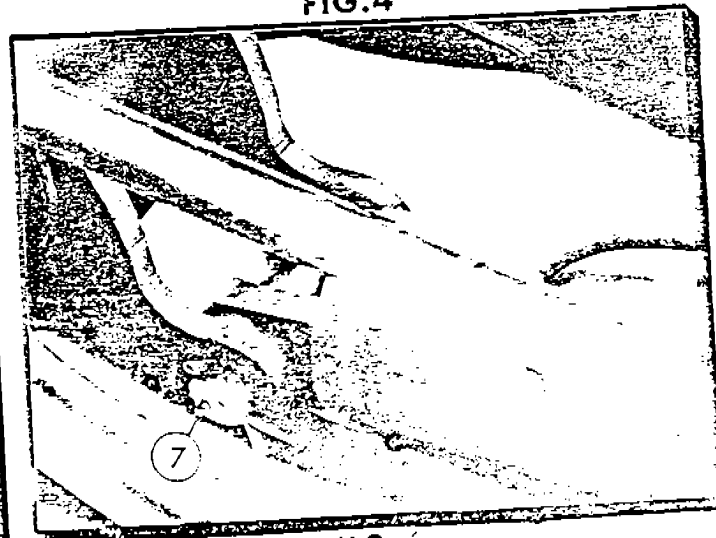
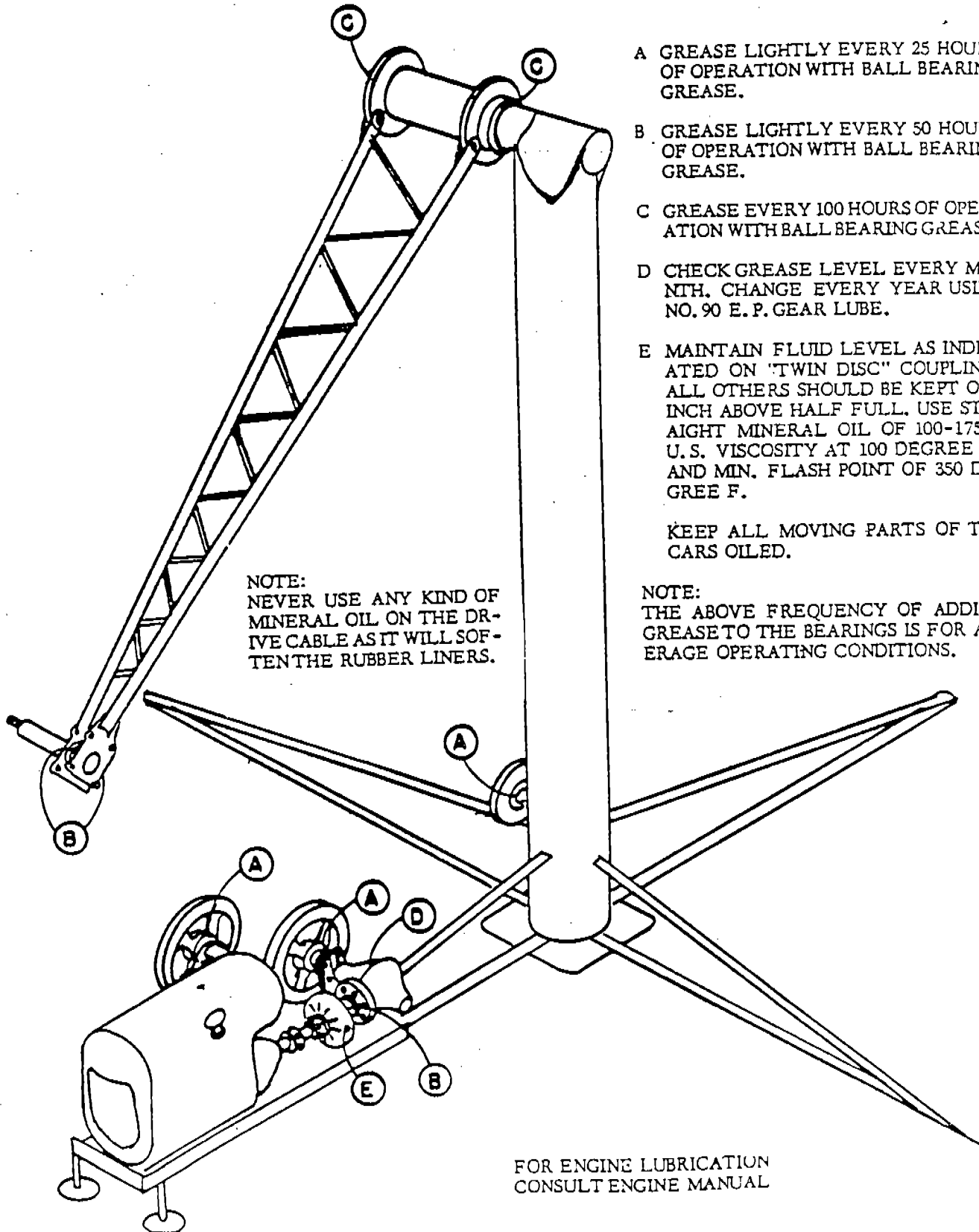


FIG. 6





# 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 OPER-  
ATION WITH BALL BEARING GREASE.

D CHECK GREASE LEVEL EVERY MO-  
NTH. CHANGE EVERY YEAR USING  
NO. 90 E. P. GEAR LUBE.

E MAINTAIN FLUID LEVEL AS INDIC-  
ATED ON "TWIN DISC" COUPLING.  
ALL OTHERS SHOULD BE KEPT ONE  
INCH ABOVE HALF FULL. USE STR-  
AIGHT MINERAL OIL OF 100-175 S.  
U. S. VISCOSITY AT 100 DEGREE F.  
AND MIN. FLASH POINT OF 350 DE-  
GREE F.

KEEP ALL MOVING PARTS OF THE  
CARS OILED.

NOTE:  
THE ABOVE FREQUENCY OF ADDING  
GREASE TO THE BEARINGS IS FOR AV-  
ERAGE OPERATING CONDITIONS.

FOR ENGINE LUBRICATION  
CONSULT ENGINE MANUAL





# 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

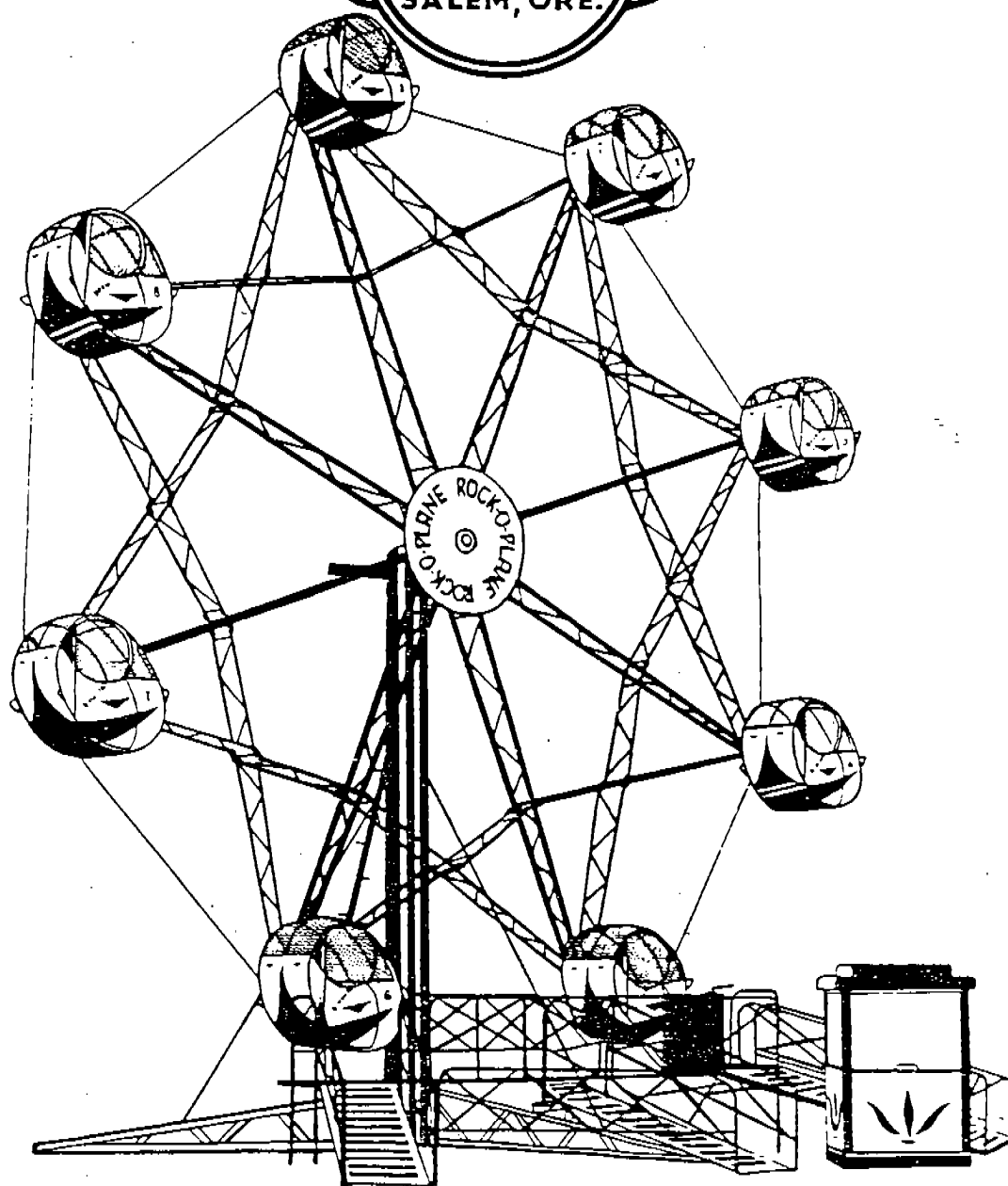
KEEP LIGHT RINGS FREE OF ALL GREASE & FOREIGN MATERIALS.

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 FOR SERVICE OF G-138 ENGINE.





# ROCK-O-PLANE PARTS CATALOG



P.O. BOX 12155  
2050 TURNER RD., S.E.  
SALEM, OREGON 97309  
(503) 399-7706

SALES AND SERVICE



## 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 1-8).
  - 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.





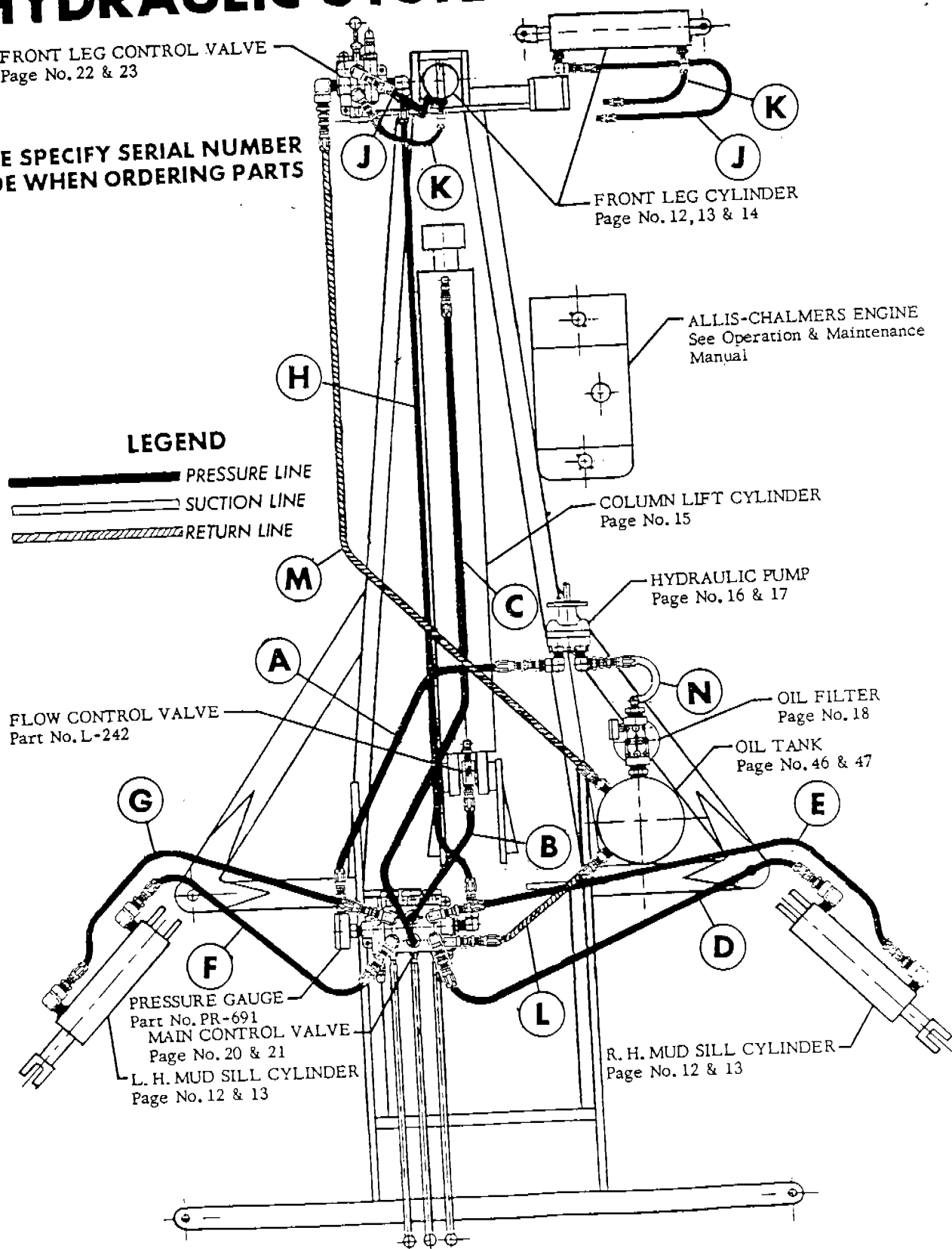
# HYDRAULIC SYSTEM DIAGRAM

FRONT LEG CONTROL VALVE  
Page No. 22 & 23

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

**LEGEND**

— PRESSURE LINE  
— SUCTION LINE  
- - - RETURN LINE







# HYDRAULIC SYSTEM DIAGRAM

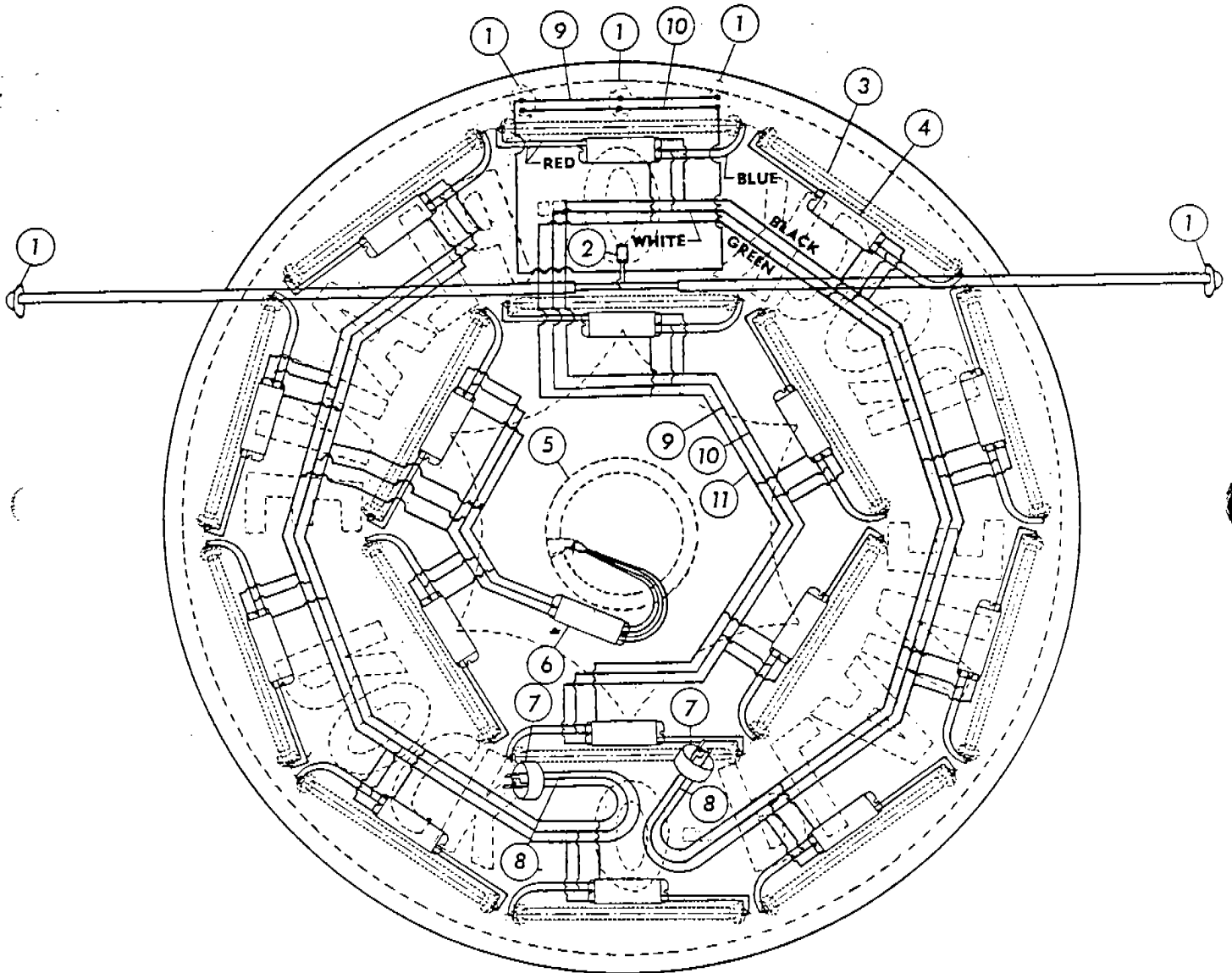
REF.	PART NO.	NAME OF PART	NO. REQ.	REF.	PART NO.	NAME OF PART	NO. REQ.
A	PR-694	1/2" HOSE ASSEMBLY (Pump to Main Control Valve) (57-1/2" Long)	1	H	PR-701	1/2" HOSE ASSEMBLY (Main Control Valve to Front Leg Control Valve) (113" Long)	1
B	PR-695	1/2" HOSE ASSEMBLY (Bottom of Column Cylinder to Main Control Valve) (48" Long)	1	J	PR-702	5/16" HOSE ASSEMBLY (Bottom of Front Leg Cylinder to Control Valve) (36" Long)	1
C	PR-696	1/2" HOSE ASSEMBLY (Top of Column Cylinder to Main Control Valve) (9 Ft. -6" Long)	1	K	PR-703	5/16" HOSE ASSEMBLY (Top of Front Leg Cylinder to Control Valve) (15" Long)	1
D	PR-697	1/2" HOSE ASSEMBLY (Bottom of R. H. Mud Sill Cylinder to Main Control Valve) (90-1/2" Long)	1	L	PR-704	1/2" HOSE ASSEMBLY (Main Control Valve to Oil Tank) (57-1/2" Long)	1
E	PR-698	1/2" HOSE ASSEMBLY (Top of R. H. Mud Sill Cylinder to Main Control Valve) (108" Long)	1	M	PR-705	1/2" HOSE ASSEMBLY (Front Leg Control Valve to Oil Tank) (145" Long)	1
F	PR-699	1/2" HOSE ASSEMBLY (Bottom of L. H. Mud Sill Cylinder to Main Control Valve) (55" Long)	1	N	PR-682	1/2" HOSE ASSEMBLY (Pump to Oil Filter) (15" Long)	1
G	PR-700	1/2" HOSE ASSEMBLY (Top of L. H. Mud Sill Cylinder to Main Control Valve) (74-1/2" Long)	1				





# SIGN WIRING DIAGRAM

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS



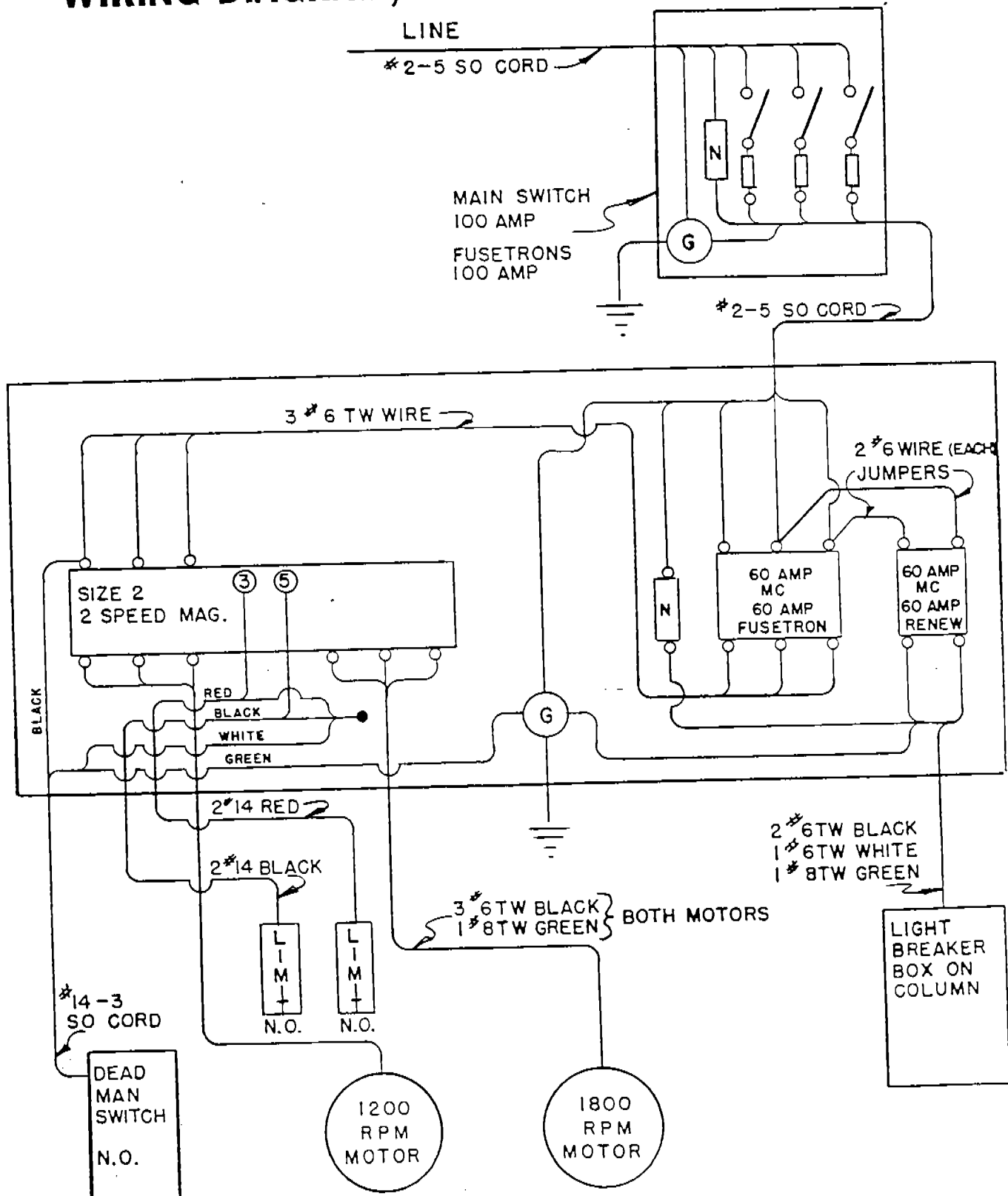
- NO. 1 MARKER LIGHT (KD524A-12)
- NO. 2 PLUG (12 VOLT) (#215 POLLOCK)
- NO. 3 FLUORESCENT LAMP (F15T12)
- NO. 4 FLUORESCENT BALLAST (GE-6G3560)
- NO. 5 CIRCLINE LAMP (FC12T10CW)
- NO. 6 CIRCLINE BALLAST (RLOCS-140)

- NO. 7 PLUG (110 VOLT) (7572)
- NO. 8 CORD (#16/3 SJ)
- NO. 9 WIRE (WHITE #16)
- NO. 10 WIRE (BLACK #16)
- NO. 11 WIRE (GREEN #16)





# WIRING DIAGRAM, 2-SPEED ELECTRIC DRIVE

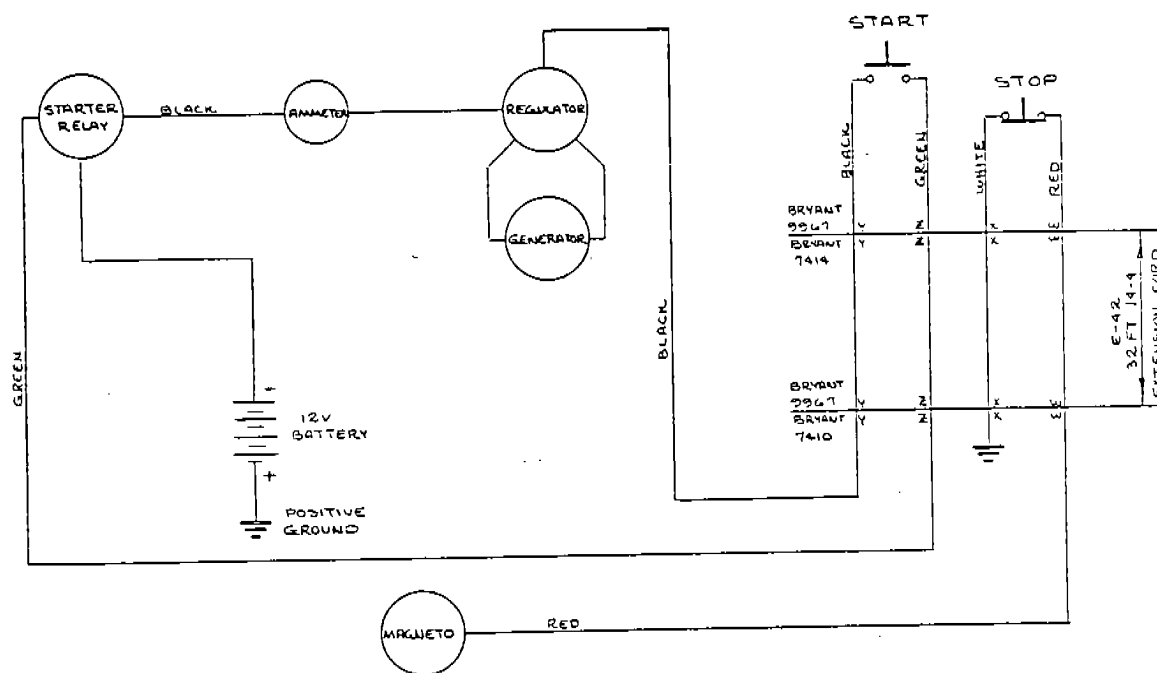






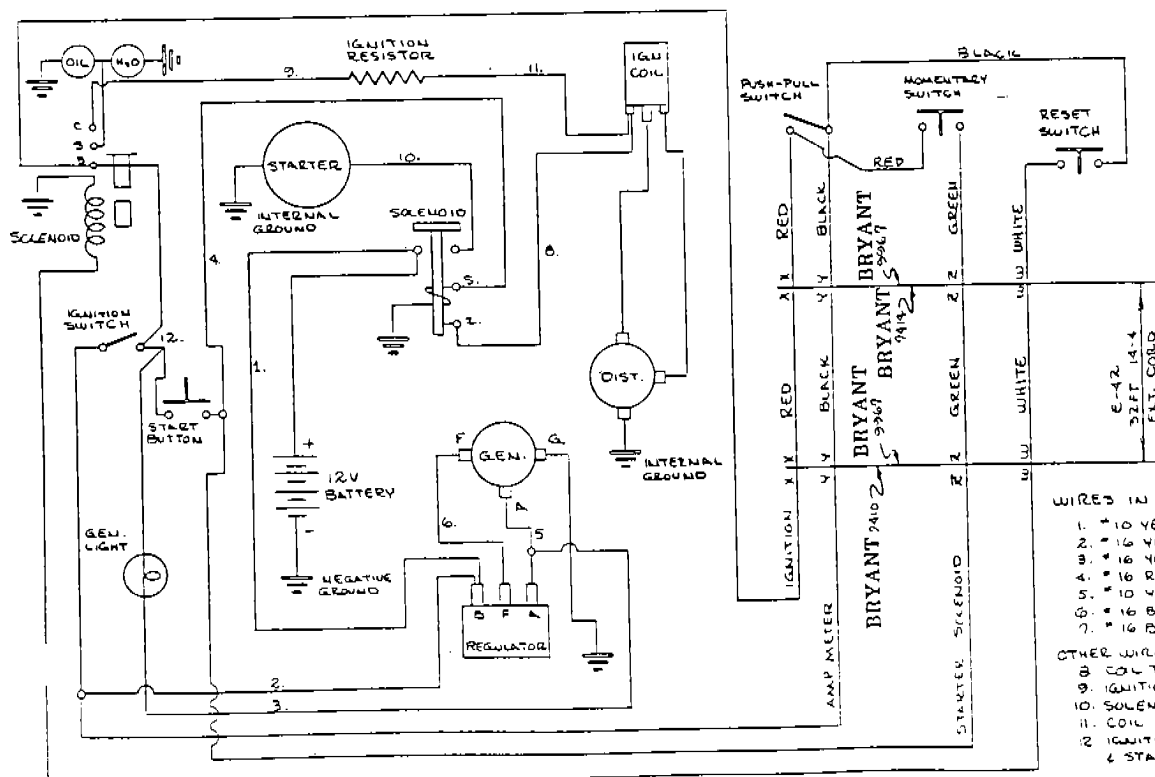
# GAS DRIVE WIRING DIAGRAM

(Allis-Chambers w/Magneto)  
B-125 G-138



# FORD POWER UNIT-w/DISTRIBUTOR

(134 & 172 Cu. In.)



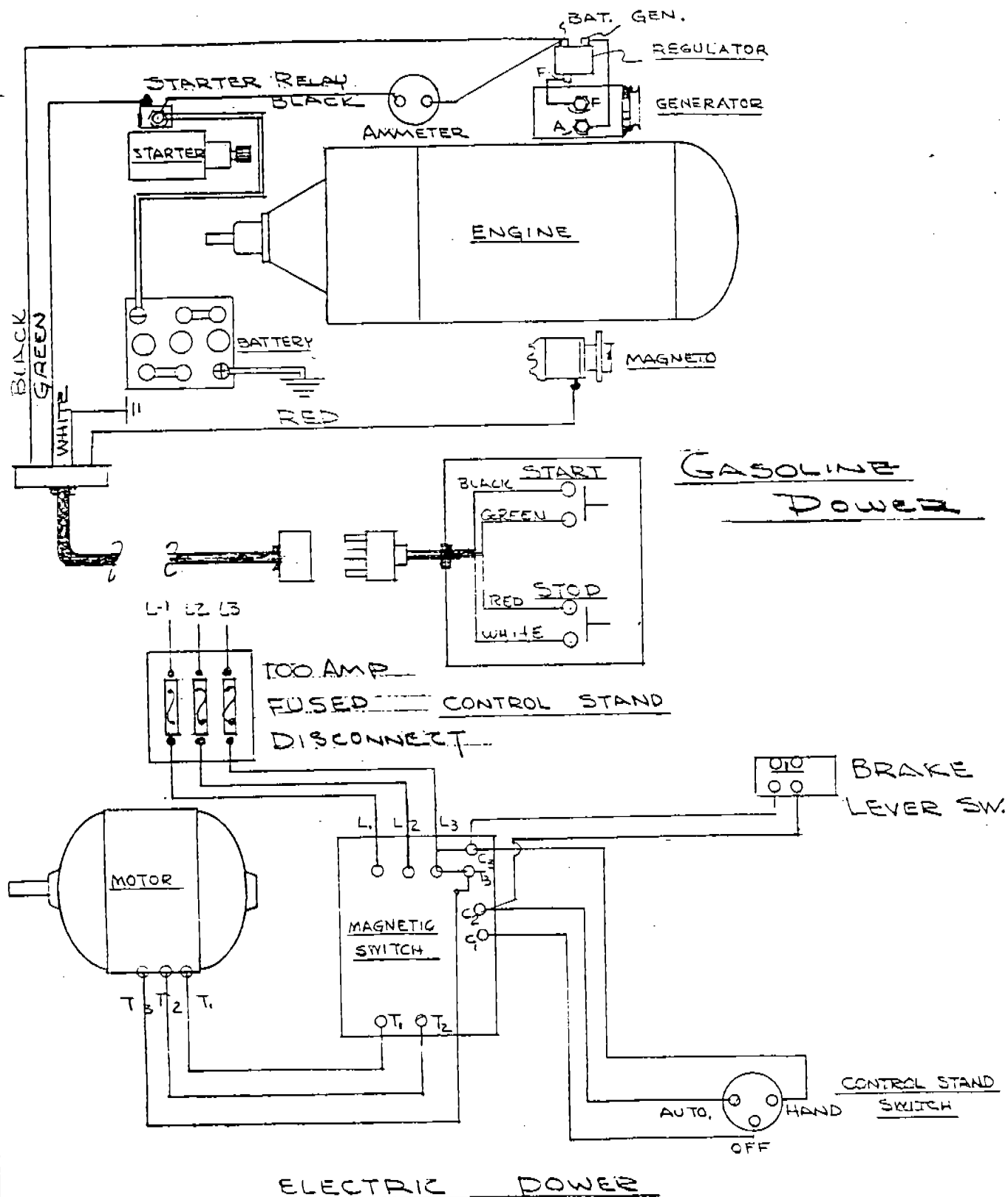
WIRES IN B7P1440-A HARNESS:

1. +10 YELLOW
2. +16 YELLOW + BLACK
3. +16 YELLOW & BLACK
4. +16 RED & BLUE + GREEN
5. +10 YELLOW & BLACK
6. +16 BLACK & WHITE
7. +16 BLACK & RED


OTHER WIRE NOT INCLUDED IN HARNESS:

8. COIL TO SOLENOID
9. IGNITION SWITCH TO RESISTOR-RED
10. SOLENOID TO STARTER
11. COIL TO RESISTOR
12. IGNITION TO GENERATOR LIGHT & STARTER BUTTON



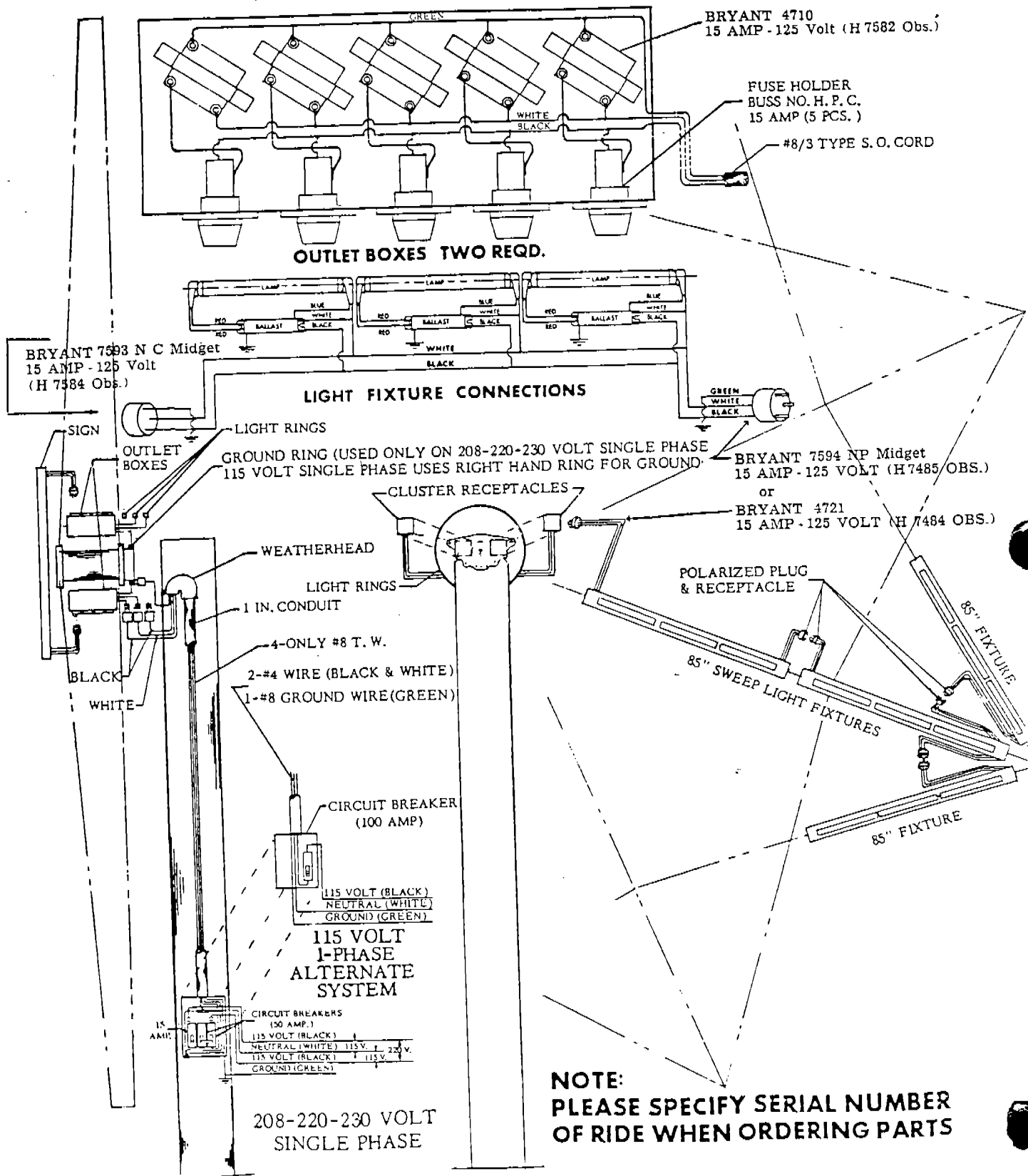


# POWER CONTROL DIAGRAM

Drawn By	No. Req.	Supersedes Drg. No.	 <p>Drg. No.</p>
Date 4-3-67	Scale NONE	Superseded By Drg. No.	



# WIRING DIAGRAM (LIGHTS)





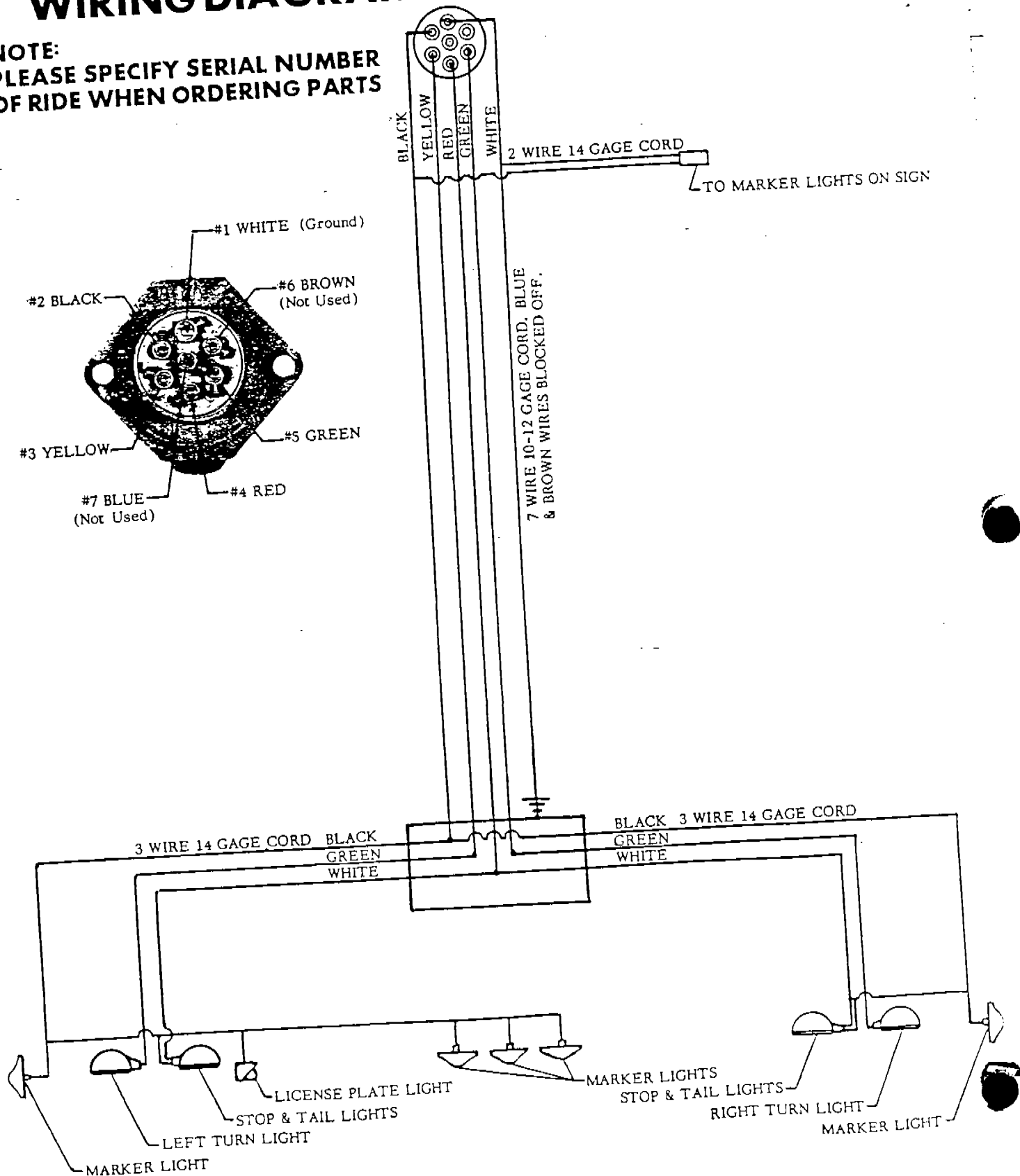






# WIRING DIAGRAM OF RUNNING LIGHTS

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS



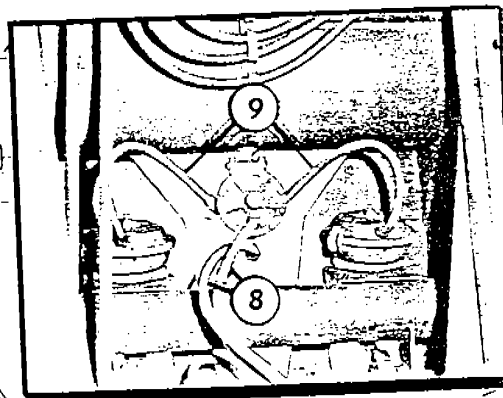
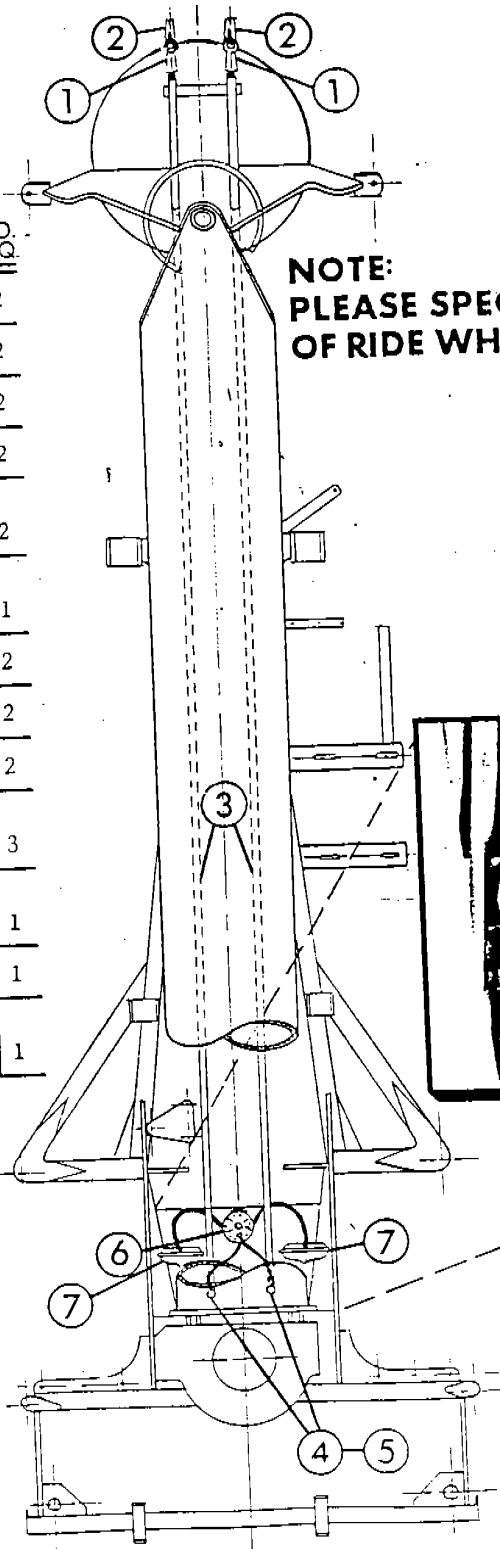


# DIAGRAM OF AIR BRAKE CONTROLS

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	L-456	AIR COUPLER	2
2	L-456D	AIR COUPLER DUMMY	2
3	PR-66	PIPE (1/2")	2
4	PR-66A	ELL (1/2")	2
5	PR-66B	PIPE BUSHING (1/2" to 1/4")	2
6	L-453	REMOTE CONTROL VALVE	1
7	L-325	AIR CHAMBER	2
8	PR-737	AIR HOSE ASSEMBLY	2
9	PR-738	AIR HOSE ASSEMBLY	2
*	L-453F	STREET ELL (1/4" Brass)	3
*	PR-739	PIPE BUSHING (3/8" to 1/4")	1
*	PR-740	PIPE COUPLING (3/8")	1
*	PR-762	HYD. NIPPLE (3/8" Air Fitting)	1

\* Not Illustrated.

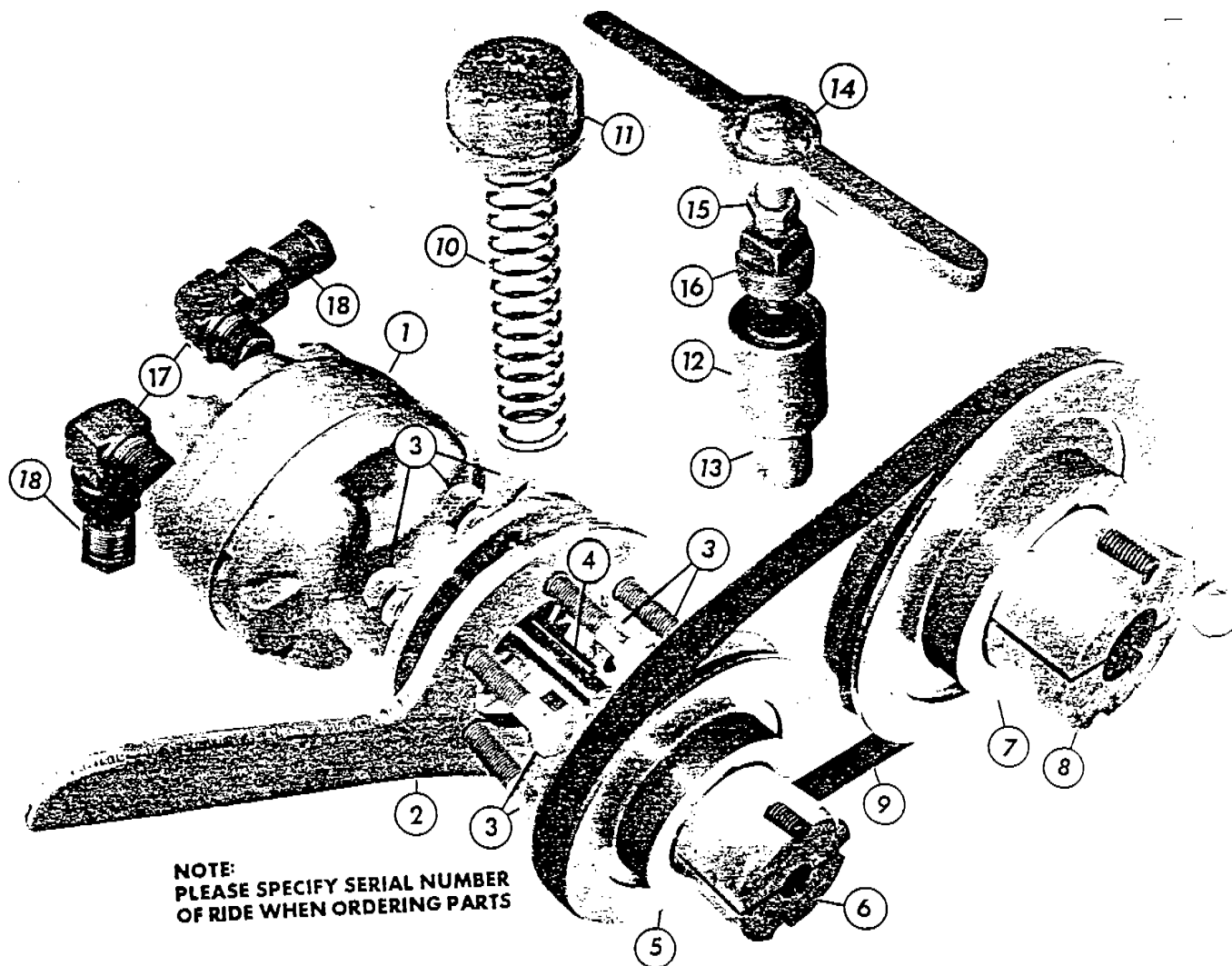
**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS







## HYDRAULIC PUMP ASSEMBLY



NOTE:  
PLEASE SPECIFY SERIAL NUMBER  
OF PUMP WHEN ORDERING PARTS





## HYDRAULIC PUMP ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-789	PUMP ASSEMBLY	1	11	L-373	BELT TENSION SPRING CAP	1
2	L-371	PUMP MOUNTING PLATE	1	12		PIPE COUPLING (1")	1
3	L-371A	MOUNTING BOLT ASSEMBLY	6	13	PR-784	SPACER	1
4	L-249B	PUMP SHAFT KEY	1	14	PR-786	BELT TIGHTENER HANDLE	1
5	L-250	PUMP SHEAVE	1	15		NUT (1/2" 13 NC)	1
6	L-250A	PUMP SHEAVE BUSHING	1	16	PR-788	MODIFIED PIPE PLUG	1
7	L-249	COUNTERSHAFT SHEAVE	1	17	PR-763	3/4" STREET ELL (Hyd. )	2
8	PR-33A	COUNTERSHAFT SHEAVE BUSHING	1	18	L-462	3/4" X 3/8" BUSHING (Hyd. )	2
9	L-251	PUMP BELT	1	*	L-33B	COUNTERSHAFT KEY	1
10	L-372	BELT TENSION SPRING	1				

\* Not Illustrated.

NOTE:

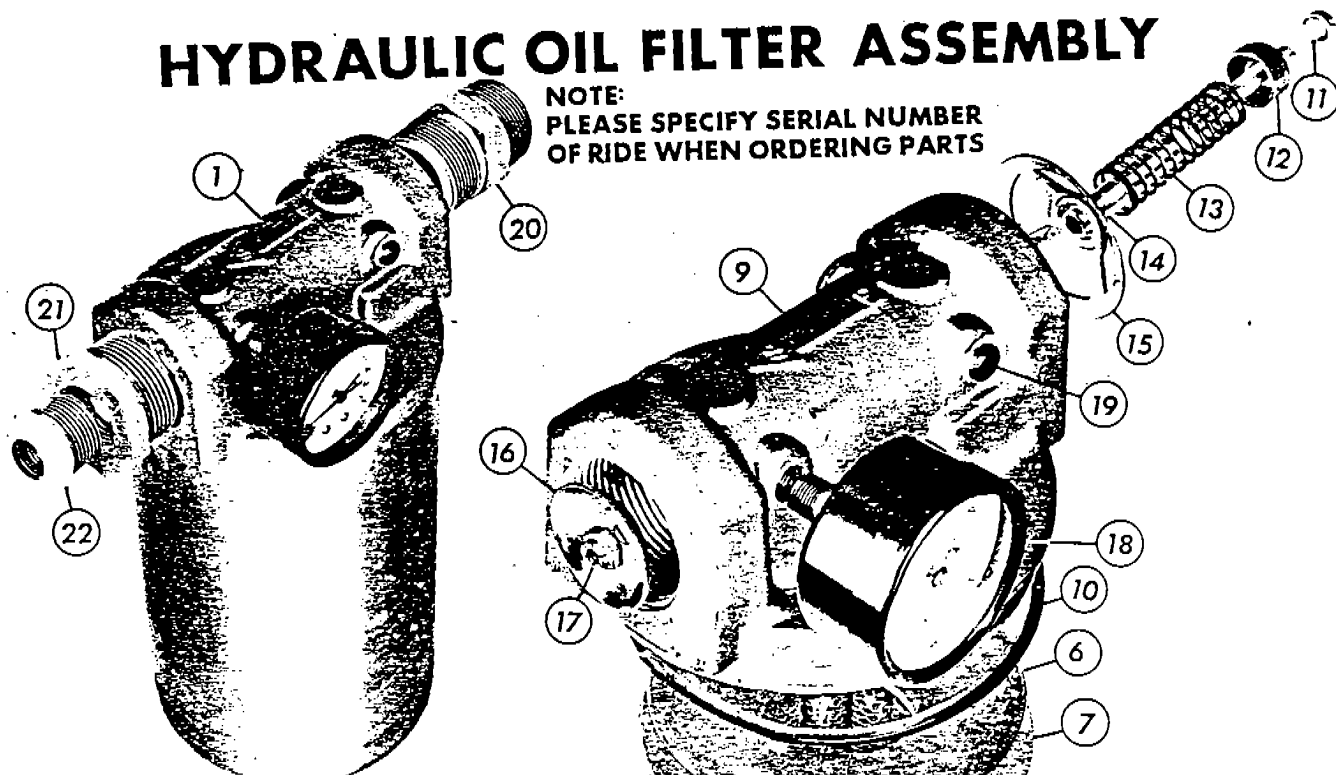
Should major repairs become necessary on this unit, we recommend that you return it to us for replacement on an exchange basis.



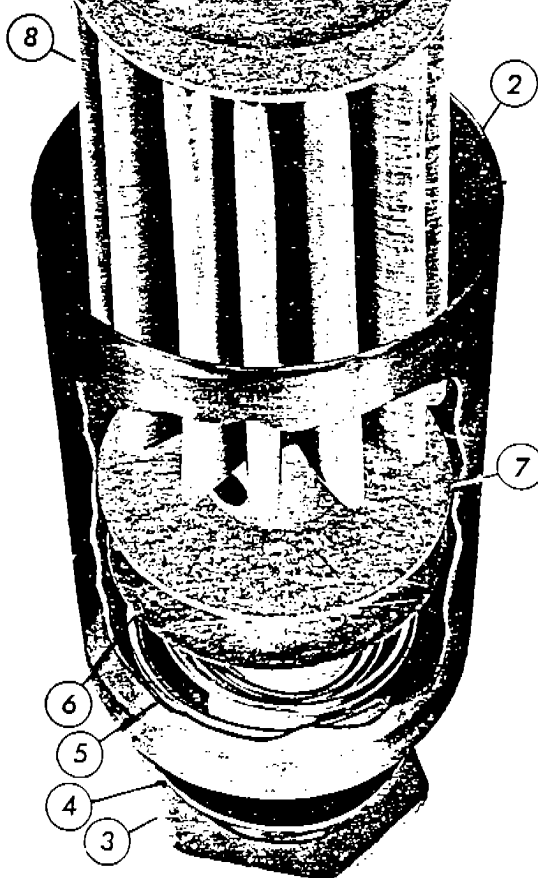


# HYDRAULIC OIL FILTER ASSEMBLY

NOTE:  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

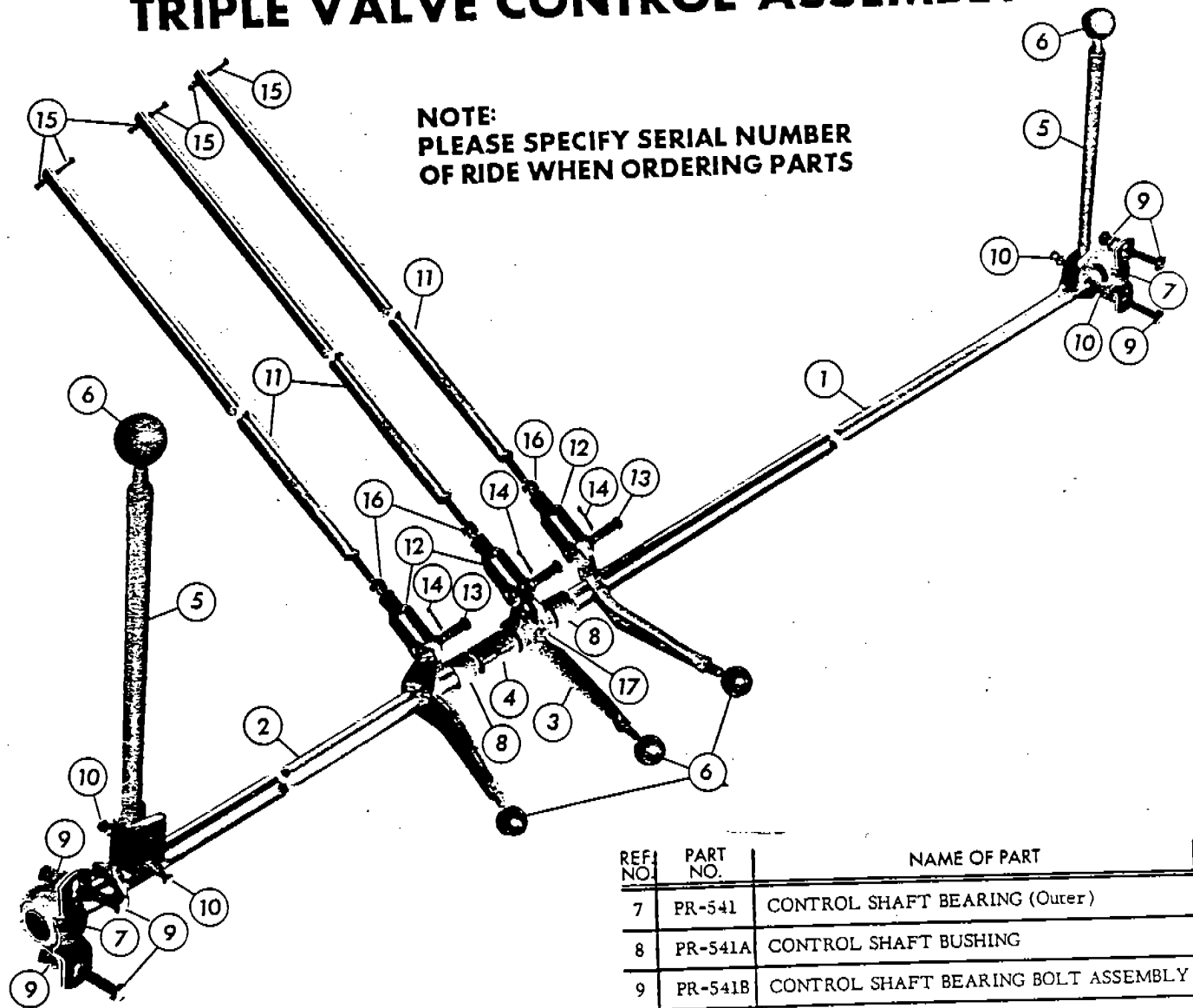


REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-475	HYDRAULIC OIL FILTER ASSY.	1
2	PR-475-1	FILTER HOUSING	1
3	PR-475-2	CENTER POST	1
4	PR-475-3	CENTER POST SEAL GASKET	1
5	PR-475-4	CONICAL SPRING	1
6	PR-475-5	BACK-UP WASHER	2
7	PR-475-6	GASKET	2
8	PR-475-A	FILTER ELEMENT	1
9	PR-475-7	FILTER HEAD CASTING	1
10	PR-475-8	FILTER HOUSING SEAL "O" RING	1
11	PR-475-9	BY-PASS FILTER HEAD SCREW	1
12	PR-475-10	BY-PASS STEM CAP	1
13	PR-475-11	BY-PASS SPRING	1
14	PR-475-12	BY-PASS VALVE SPACER	1
15	PR-475-13	BY-PASS GUIDE	1
16	PR-475-14	BY-PASS VALVE	1
17	PR-475-15	BY-PASS LOCKNUT	1
18	PR-475-16	COMPOUND INDICATOR	1
19	PR-475-17	PIPE PLUG	1
20	PR-678	1-1/4" NIPPLE (Hyd. )	1
21	PR-679	1-1/4" X 3/4" BUSHING	1
22	L-462	3/4" X 3/8" BUSHING (Hyd. )	1





# TRIPLE VALVE CONTROL ASSEMBLY



**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

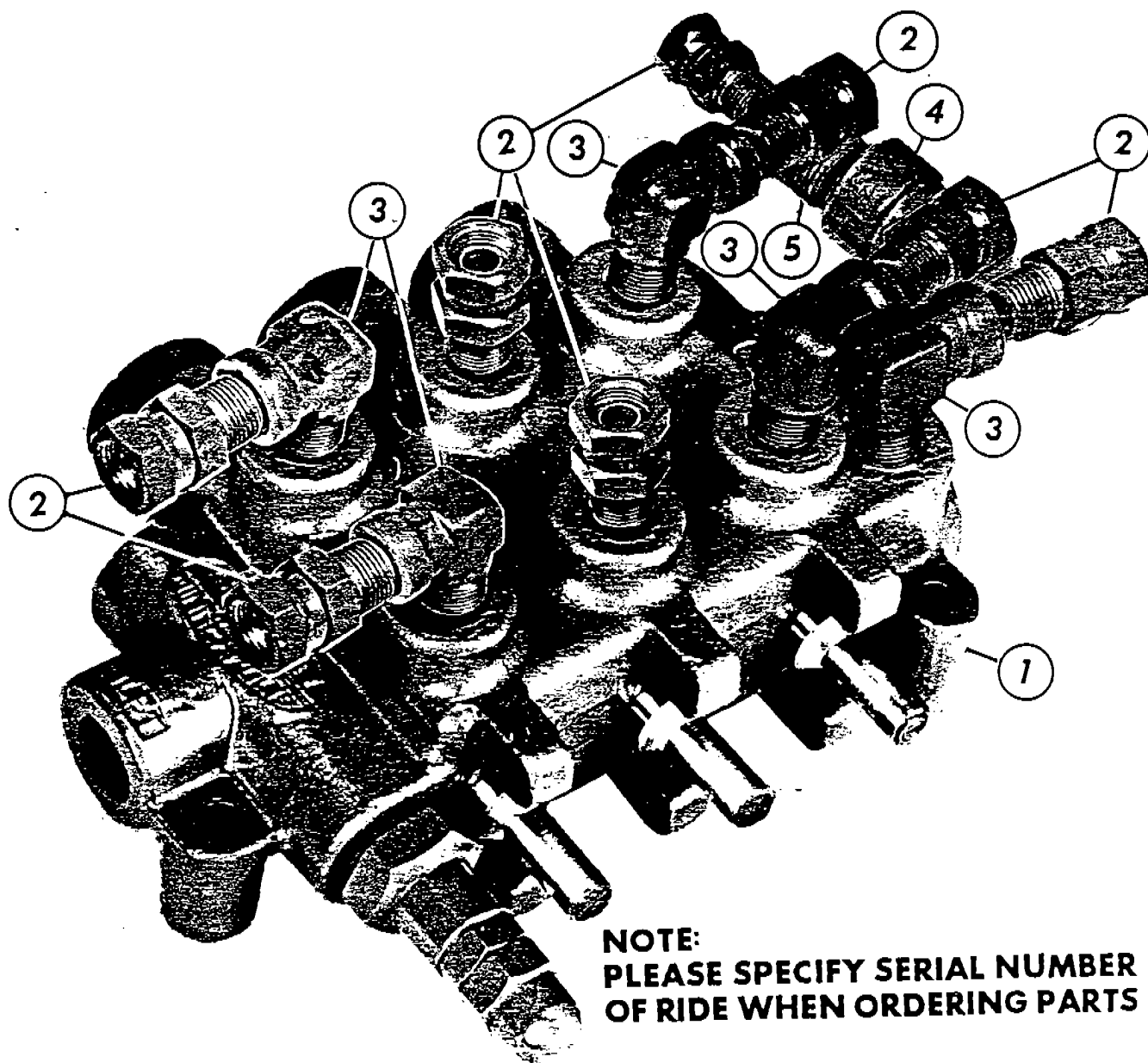
REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-412	HYDRAULIC VALVE CONTROL SHAFT (R.H.)	1
2	PR-413	HYDRAULIC VALVE CONTROL SHAFT (L.H.)	1
3	PR-416	VALVE CONTROL LEVER (Center)	1
4	PR-416A	CENTER CONTROL LEVER BUSHING	1
5	PR-668	VALVE CONTROL LEVER (Outer)	2
6	PR-668A	VALVE CONTROL LEVER BALL	5

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
7	PR-541	CONTROL SHAFT BEARING (Outer)	2
8	PR-541A	CONTROL SHAFT BUSHING	4
9	PR-541B	CONTROL SHAFT BEARING BOLT ASSEMBLY	4
10	PR-668B	OUTER CONTROL LEVER BOLT ASSEMBLY	2
11	PR-411	VALVE PUSH ROD	3
12	PR-411A	VALVE PUSH ROD CLEVIS	3
13	PR-411B	VALVE PUSH ROD CLEVIS PIN	3
14	PR-411C	VALVE PUSH ROD CLEVIS PIN COTTER KEY	3
15	PR-411D	VALVE PUSH ROD BOLT ASSEMBLY	3
16	PR-411E	VALVE PUSH ROD CLEVIS LOCK NUT	3
17	O-275A	ZERK FITTING	3





# TRIPLE HYDRAULIC VALVE ASSEMBLY



**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS





# TRIPLE HYDRAULIC VALVE ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-76	CONTROL VALVE ASSY. (3 Spool)	1
2	PR-680	3/8" HOSE SWIVEL (Hyd.)	8
3	PR-500	3/8" STREET ELL (Hyd.)	5

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
4	PR-763	3/4" STREET ELL (Hyd.)	1
5	L-462	3/4" X 3/8" BUSHING (Hyd.)	1





# FRONT LEG CONTROL VALVE ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	L-241	CONTROL VALVE ASSY.	1	5	PR-500	3/8" STREET ELL (Hyd.)	2
2	PR-763	3/4" STREET ELL (Hyd.)	2	6	PR-690	3/8" X 1/4" BUSHING (Hud.)	2
3	L-462	3/4" X 3/8" BUSHING (Hyd.)	2	7	PR-689	1/4" HOSE SWIVEL (Hyd.)	2
4	PR-680	3/8" HOSE SWIVEL (Hyd.)	2				

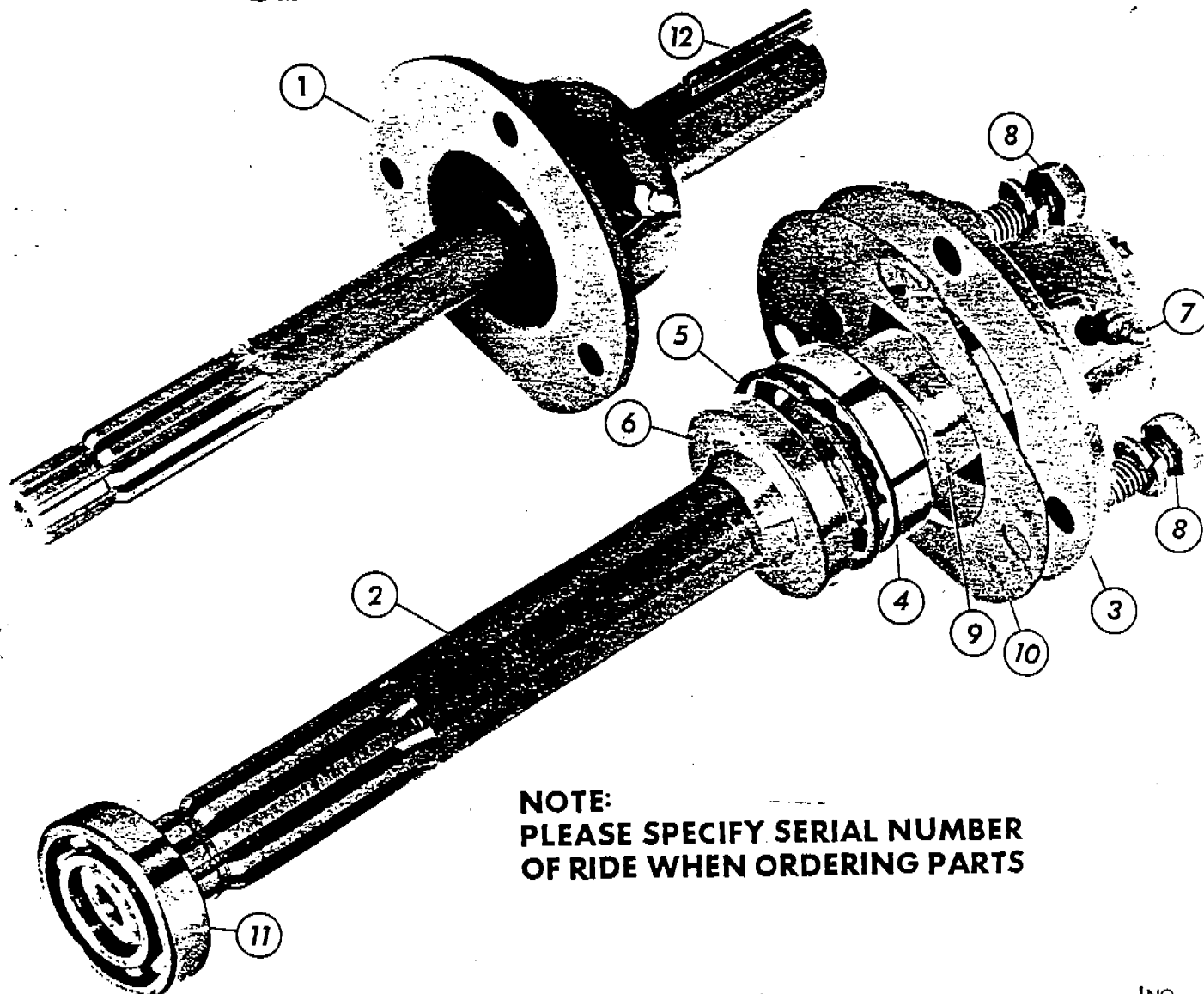


REF NO.	PART NO.	NAME OF PART	NO. REQ.
18	PR-428C	COTTER KEY	2
19	RR-511	RETURN SPRING	1
20	L-427	THROTTLE ROD END (5/16")	1
21	L-427A	THROTTLE ROD END BOLT ASSY.	1
22	PR-613A	THROTTLE ROD SLIDE BOLT ASSY.	1
23	PR-196	ENGINE BELT TIGHTENER	2
24	PR-771	ENGINE RISER PAD	2
*	PR-542A	CLUTCH LEVER BUSHING	1
*	PR-428A	CLUTCH BRAKE LEVER BUSHING	1
*	PR-650	CONTROL BUSHING	1
*	W-234	BATTERY	1
*	W-234A	BATTERY CABLE (Positive)	1
*	W-234B	BATTERY CABLE (Negative)	1

\* Not Illustrated.



# CLUTCH SHAFT ASSEMBLY



**NOTE:**  
**PLEASE SPECIFY SERIAL NUMBER**  
**OF RIDE WHEN ORDERING PARTS**

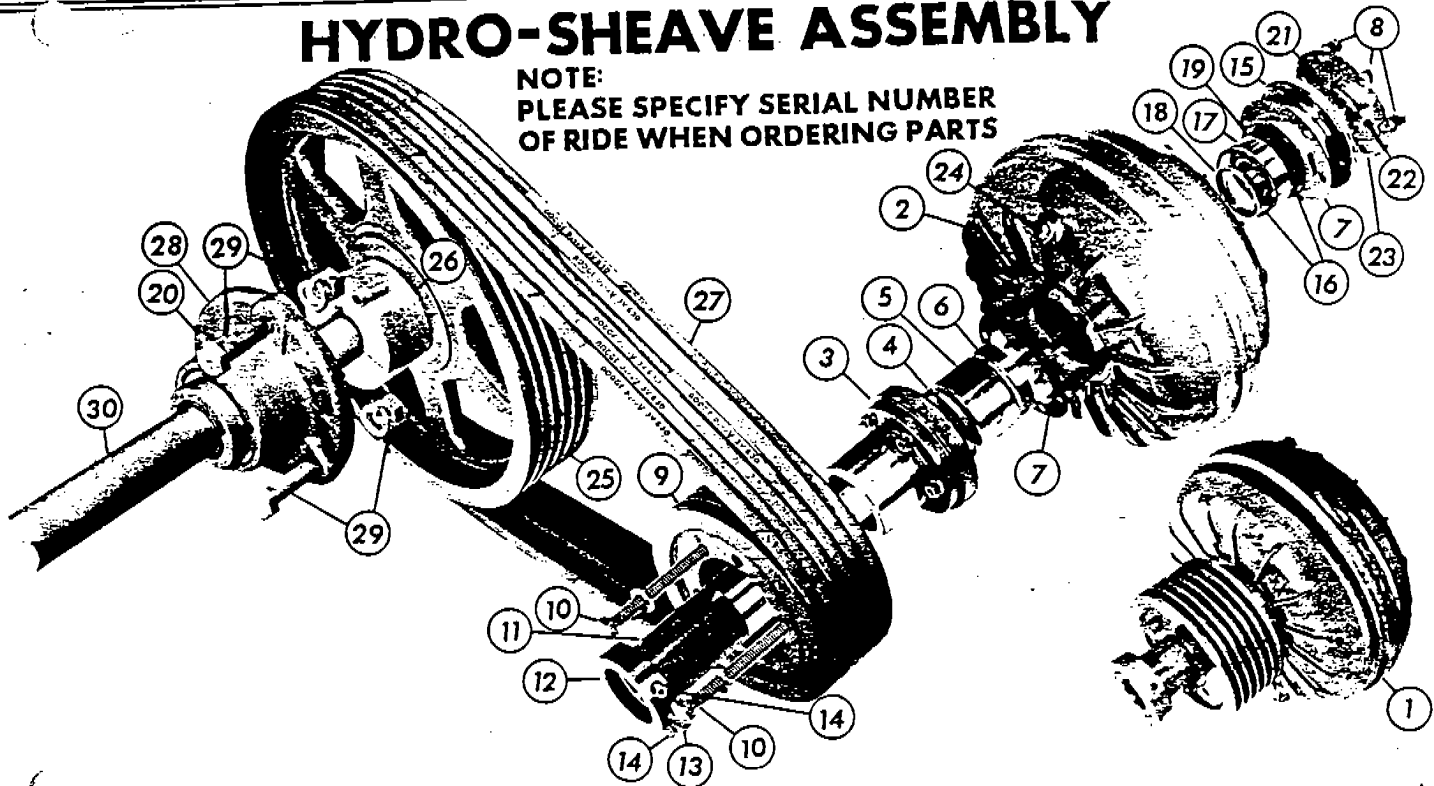
REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	L-472	CLUTCH SHAFT ASSEMBLY	1	7	O-275	ZERK FITTING	1
2	L-476F	CLUTCH SHAFT	1	8	L-476B	CAP SCREW & LOCKWASHER	3
3	L-476	BEARING HOUSING	1	9	L-476G	SPACER SLEEVE	1
4	W-241	BEARING (Outer)	1	10	L-476A	BEARING HOUSING GASKET	1
5	L-476D	BEARING SNAP RING	1	11	L-476H	PILOT BEARING	1
6	L-476E	BEARING OIL SEAL	1	12	PR-765	CLUTCH SHAFT KEY	1





# HYDRO-SHEAVE ASSEMBLY

NOTE:  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS



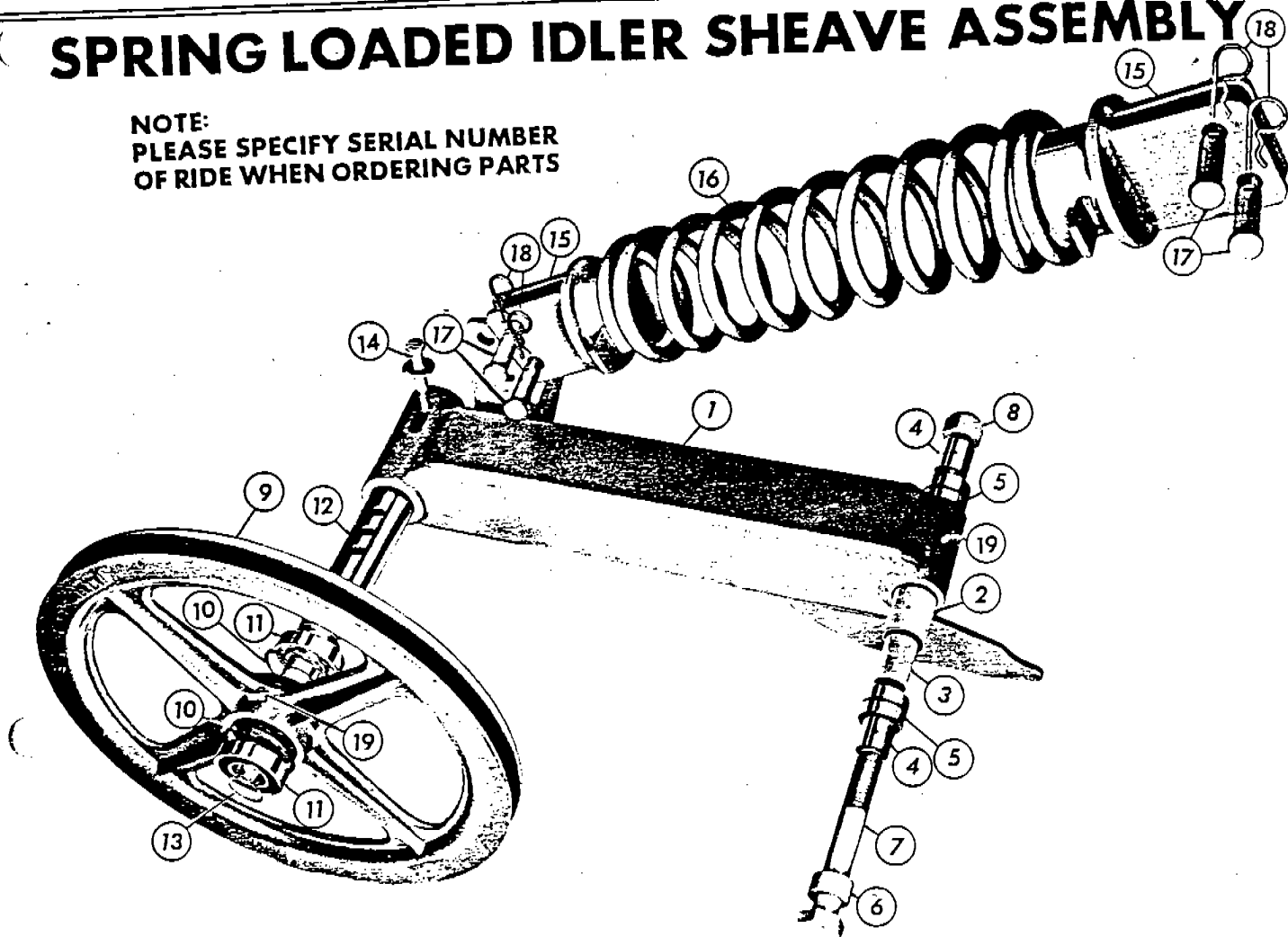
REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-40	HYDRO-SHEAVE ASSEMBLY (Less Sheave)	1	17	W-258	BEARING	1
2	PR-561	HOUSING & IMPELLER ASSEMBLY	1	18	PR-570	SPACER	1
3	PR-562	SHEAVE HUB	1	19	W-328	"O" RING	1
4	PR-563	OIL SEAL (Outer)	1	20	O-275	ZERK FITTING	3
5	PR-564	NEEDLE BEARING	1	21	W-273	LOCKWASHER	1
6	W-329	OIL SEAL (Inner)	1	22	W-264	NUT	1
7	W-260	IMPELLER GASKET	2	23	PR-571	COVER PLATE	1
8	L-284C	NUT & LOCKWASHER ASSEMBLY (Sheave Hub & Bearing Carrier)	12	24	PR-572	PIPE PLUG	2
9	PR-41	SHEAVE	1	25	PR-33	COUNTERSHAFT SHEAVE	1
10	PR-565	CAP SCREW ASSEMBLY (Sheave)	3	26	PR-33A	COUNTERSHAFT SHEAVE BUSHING	1
11	PR-566	SHAFT	1	27	PR-36	"V" BELT (3V-630)	6
12	PR-567	CLAMP RING	1	28	PR-45	COUNTERSHAFT FLANGE UNIT	3
13	PR-568	SET SCREW (Long)	1	29	PR-45B	FLANGE UNIT BOLT ASSEMBLY	9
4	PR-569	SET SCREW (Short)	2	30	PR-44	COUNTERSHAFT	1
15	W-259	BEARING CARRIER	1	*	PR-33B	COUNTERSHAFT SHEAVE KEY	1
16	W-266	SNAP RING	2	*	W-263	IMPELLER KEY	1

\* Not Illustrated



# SPRING LOADED IDLER SHEAVE ASSEMBLY

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

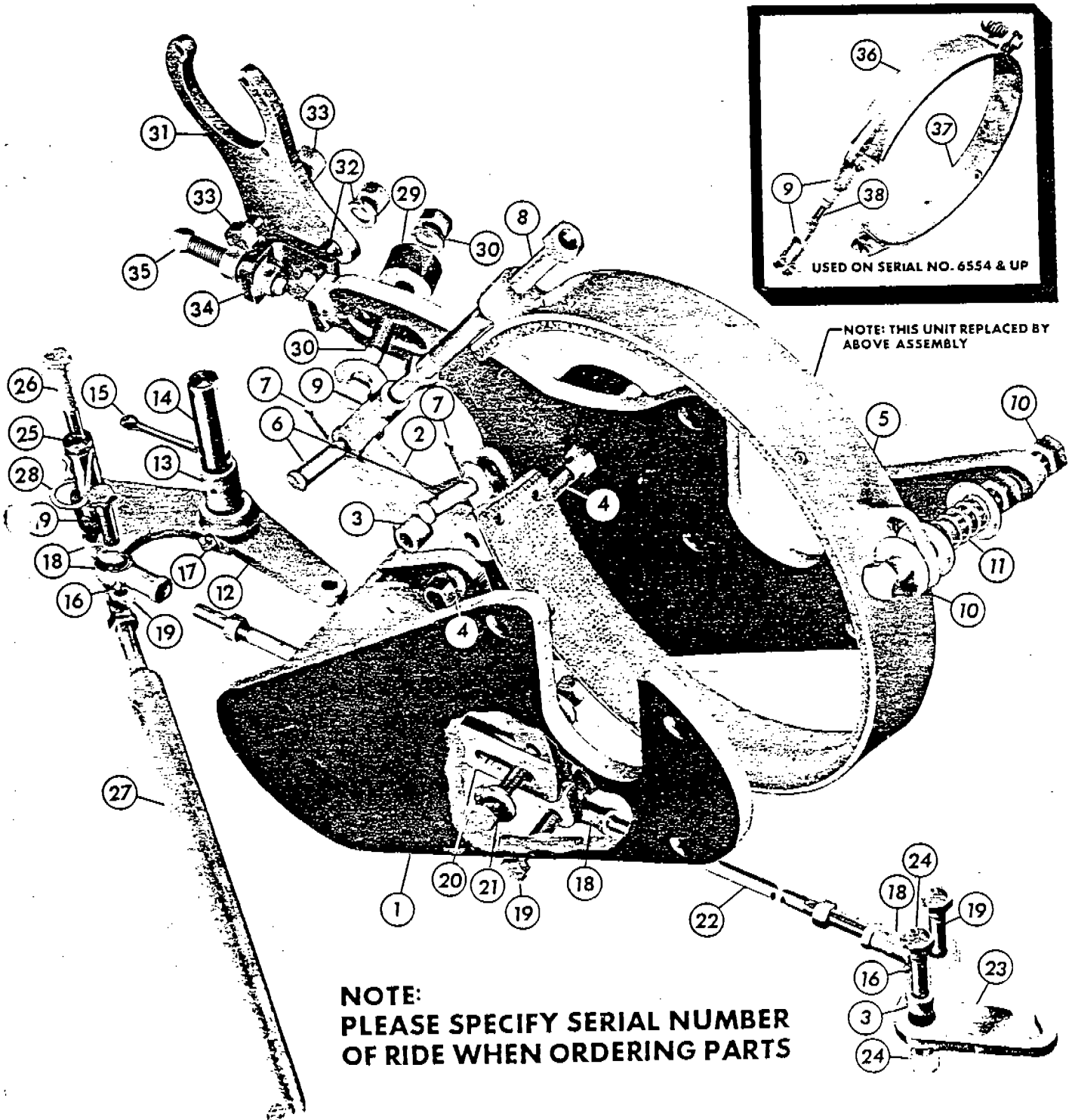


PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-12	1	11	W-241	SHEAVE BEARING	2
2	PR-552	1	12	W-27	SHEAVE SHAFT	1
3	PR-551	1	13	W-240	SHEAVE BEARING SNAP RING (Outer)	1
4	PR-511	2	14	W-27A	SHAFT RETAINER BOLT ASSEMBLY (Bolt, 2 Flat Washers, Lockwasher & Nut)	1
5	PR-511A	2	15	PR-313	IDLER SPRING BASE	2
6	PR-601	1	16	PR-510	IDLER SPRING	1
7	PR-657	1	17	W-83	TAPER PIN (3/4")	4
8	PR-657A	1	18	W-83A	TAPER PIN SAFETY KEY	4
9	PR-310	1	19	O-275A	ZERK FITTING (Straight)	2
10	W-242	2				





# BRAKE CONTROL ASSEMBLY







# BRAKE CONTROL ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-10	DRIVE UNIT ASSEMBLY	1
2	PR-245	BRAKE LEVER	1
3	PR-650	BUSHING	2
4	PR-245A	BRAKE LEVER BOLT ASSEMBLY	1
5	PR-61	BRAKE BAND (Replaced By No. 36 PR-796 (See Note (A) Below)	1
6	O-294A	CLEVIS PIN (See Note (D) )	2 or 3
7	O-294B	CLEVIS PIN COTTER (See Note (D) )	2 or 3
8	PR-617	BRAKE BAND ROD ASSEMBLY (Use With PR-61 Brake Band)	1
9	O-294	BRAKE BAND ROD CLEVIS (See Note (C) Below)	1 or 2
	PR-61B	BRAKE BAND GUIDE BOLT ASSY.	1
11	PR-61C	BRAKE BAND GUIDE BOLT SPRING	1
12	PR-428	CLUTCH BRAKE LEVER	1
13	PR-428A	CLUTCH BRAKE LEVER BUSHING	1
14	PR-428B	CLUTCH BRAKE LEVER PIN	1
15	PR-428C	CLUTCH BRAKE LEVER PIN COTTER PIN	1
16	O-275A	ZERK FITTING	3
17	O-275B	ZERK FITTING (Angle)	1
18	O-551	CONTROL ROD END (1/2")	1
19	O-551B	CONTROL ROD END BOLT ASSY.	3
20	PR-544	BRAKE LINK	1

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
21	PR-544A	BRAKE LINK BOLT ASSEMBLY	1
22	PR-665	BRAKE ROD	1
23	PR-549	FOOT BRAKE BELL CRANK	1
24	PR-549A	FOOT BRAKE BELL CRANK BOLT ASSEMBLY	1
25	PR-527	CONTROL ROD ANCHOR	1
26	PR-527A	CONTROL ROD ANCHOR BOLT ASSEMBLY	1
27	PR-635	CONTROL STAND ROD ASSY.	1
28	W-83A	SAFETY KEY	1
29	PR-612	DRIVE UNIT SPACER BLOCK	1
30	PR-612A	DRIVE UNIT SPACER BLOCK BOLT ASSEMBLY	1
31	PR-621	BOLT ADJUSTING PLATE (Upper)	1
32	PR-621B	BOLT ADJUSTING PLATE BOLT ASSEMBLY (Long)	1
33	PR-621A	BOLT ADJUSTING PLATE BOLT ASSEMBLY (Short)	1
34	PR-410	BELT TIGHTENER BRACKET	1
35	PR-410A	BELT TIGHTENER SCREW ASSY.	1
36	PR-796	BRAKE BAND (Lined) (See Note (B) Below)	1
37	PR-61A	BRAKE BAND LINING	1
38	PR-797	BRAKE BAND ROD w/NUTS (See Note (B) Use With PR-796 Brake Band)	1

(A) REPLACEMENT BRAKE BAND, PART NO. PR-796, FOR MACHINES PRIOR TO SERIAL NO. 6554 REQUIRES CHANGE OVER PART NO'S. O-294, O-294A & PR-797.

(B) SERIAL NO. 6554 AND LATER.

(C) TWO CLEVISES ARE REQUIRED ON SERIAL NO.

6554 AND LATER. ONE CLEVIS IS REQUIRED PRIOR TO SERIAL NO. 6554 AND USING PR-61 BRAKE BAND.

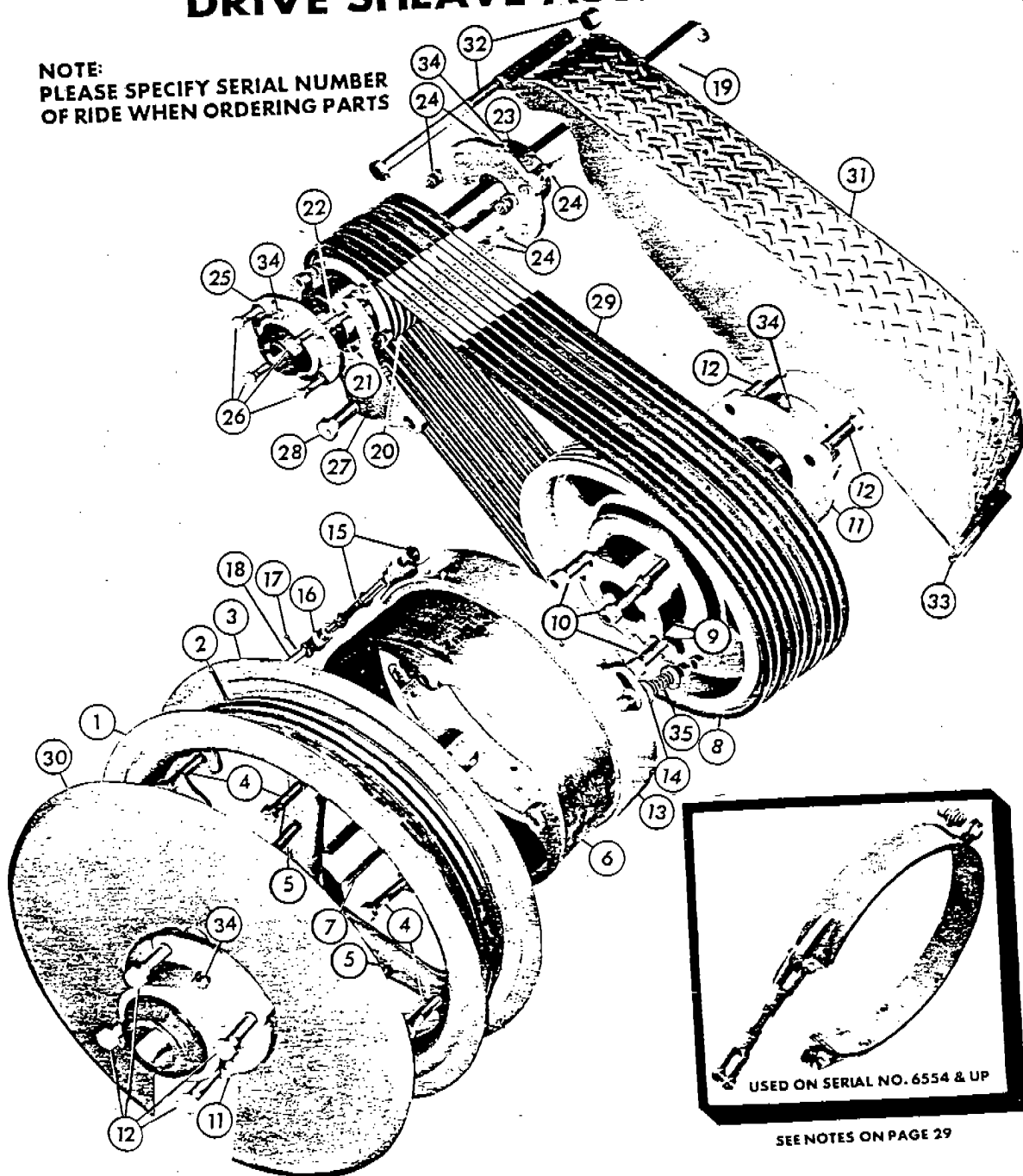
(D) THREE CLEVIS PINS & COTTERS ARE REQUIRED ON SERIAL NO. 6554 AND LATER. TWO CLEVIS PINS & COTTERS ARE REQUIRED PRIOR TO SERIAL NO. 6554 AND USING PART NO. PR-61 BRAKE BAND.





## DRIVE SHEAVE ASSEMBLY

NOTE:  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS







# DRIVE SHEAVE ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	W-3	CABLE DRIVE WHEEL	1
2	W-4	CABLE DRIVE WHEEL BAND	1
3	W-3A	CABLE DRIVE WHEEL RING	1
4	W-3B	CABLE DRIVE WHEEL BOLT ASSEMBLY	8
5	PR-60A	BRAKE DRUM BOLT ASSEMBLY	4
6	PR-60	BRAKE DRUM	1
7	PR-46	CABLE DRIVE WHEEL SHAFT	1
8	PR-43	DRIVE UNIT SHEAVE (Large)	1
9	PR-43A	DRIVE UNIT SHEAVE BUSHING (Large)	1
10	PR-43C	DRIVE UNIT SHEAVE BUSHING LOCK SCREW	3
11	O-320	DRIVE SHAFT FLANGE UNIT	2
12	O-320A	DRIVE SHAFT FLANGE UNIT BOLT ASSEMBLY	8
13	**PR-61	BRAKE BAND (With Lining)	1
14	PR-61B	BRAKE BAND GUIDE BOLT ASSEMBLY	1
15	**PR-617	BRAKE BAND ROD ASSEMBLY	1
16	**O-294	BRAKE BAND ROD CLEVIS	1
17	**O-294B	BRAKE BAND ROD CLEVIS COTTER KEY	1
18	**O-294A	BRAKE BAND ROD CLEVIS PIN	1
19	PR-44	COUNTERSHAFT	1
20	PR-42	DRIVE UNIT SHEAVE (Small)	1
21	PR-33A	DRIVE UNIT SHEAVE BUSHING (Small)	1

\*\* SEE NOTES ON PAGE 29

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
22	PR-33C	DRIVE UNIT SHEAVE BUSHING LOCK SCREW	2
23	PR-45	COUNTERSHAFT FLANGE UNIT	1
24	PR-45B	COUNTERSHAFT FLANGE UNIT BOLT ASSEMBLY	3
25	PR-45A	COUNTERSHAFT FLANGE UNIT (Rear)	1
26	PR-45C	COUNTERSHAFT FLANGE UNIT BOLT ASSEMBLY	4
27	PR-621	BELT ADJUSTING PLATE (Upper)	1
28	PR-621A	BELT ADJUSTING PLATE BOLT ASSEMBLY (Short)	1
29	PR-73	DRIVE BELTS (Matched Set of Ten)	1
30	PR-408	DRIVE WHEEL GUARD	1
31	PR-429	REAR BELT GUARD	1
32	PR-429A	REAR BELT GUARD BOLT ASSEMBLY	1
33	PR-429B	REAR BELT GUARD COTTER KEY	1
34	O-275	ZERK FITTING	4
35	PR-61C	BRAKE BAND SPRING	1
*	PR-43D	DRIVE UNIT SHEAVE KEY (Large)	1
*	PR-33B	DRIVE UNIT SHEAVE KEY (Small)	1
*	PR-61A	BRAKE LINING	1
*	O-404	CABLE DRIVE WHEEL KEY	2
*	W-235	3/8" DRIVE CABLE	1

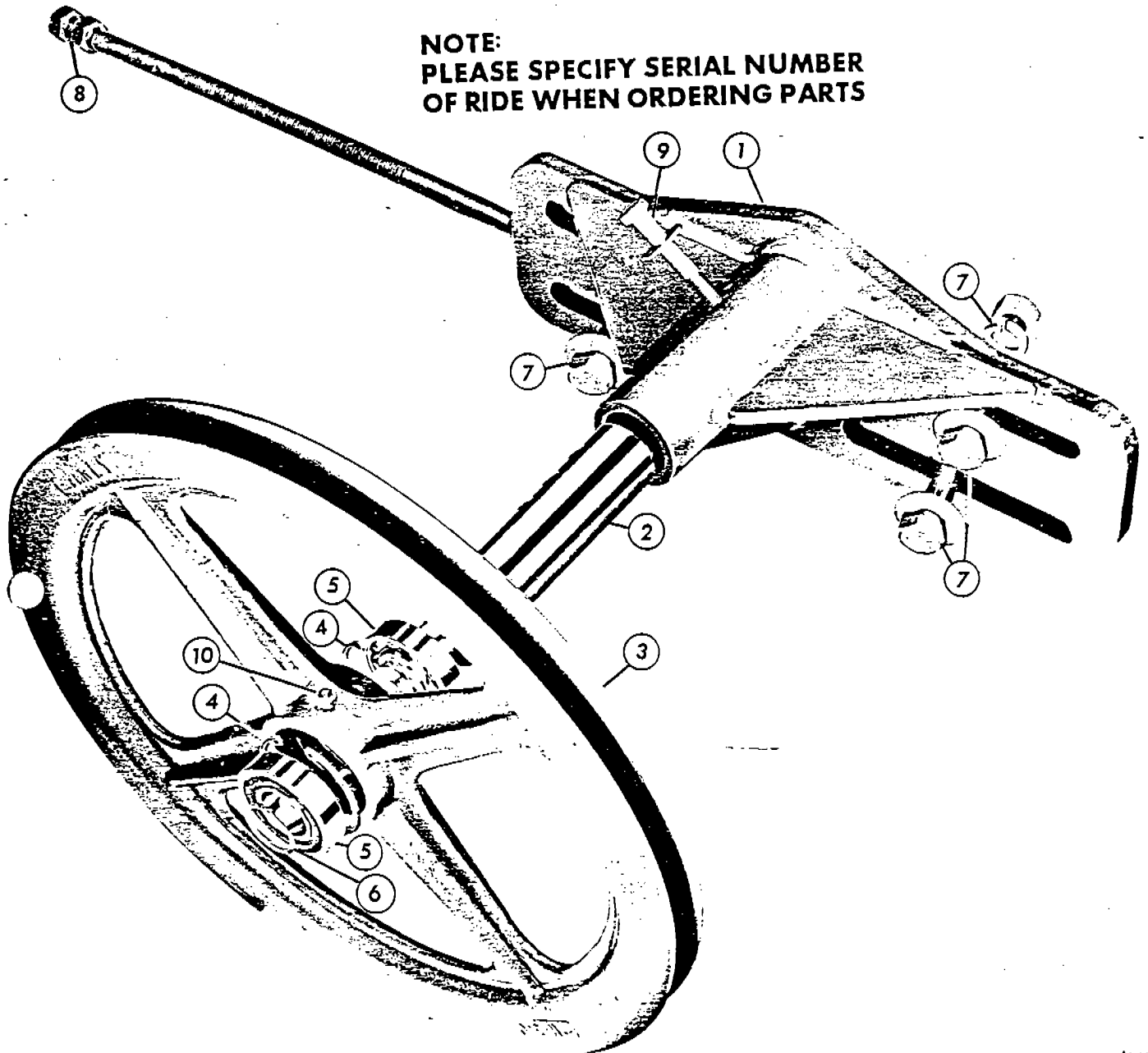
\* Not Illustrated.





# CABLE ADJUSTING SHEAVE ASSEMBLY

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

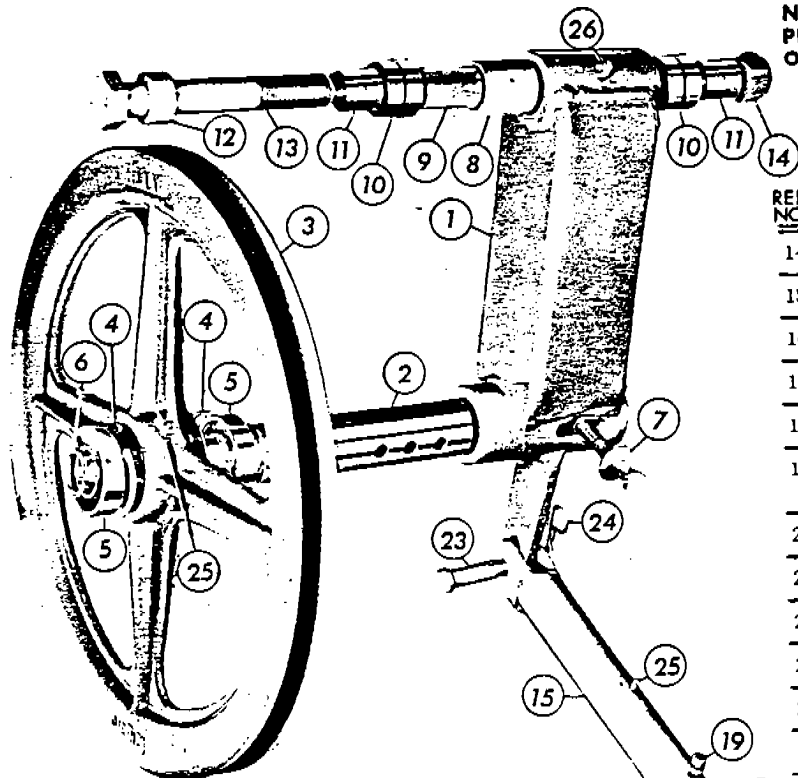


REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-423	CABLE ADJUSTING BRACKET	1	7	PR-528A	CABLE ADJUSTING BRACKET BOLT ASSY. ( Bolt, Flat Washer, Lockwasher & Nut )	4
2	W-27	SHEAVE SHAFT	1	8	PR-528B	CABLE ADJUSTING BRACKET ADJUSTING NUT	2
	PR-310	SHEAVE	1	9	W-27A	SHAFT RETAINER BOLT ASSEMBLY (Bolt, 2 Flat Washers, Lockwasher & Nut )	1
4	W-242	SHEAVE BEARING INNER SNAP RING	2	10	O-275	ZERK FITTING	1
5	W-241	SHEAVE BEARING	2				
6	W-240	SHEAVE BEARING OUTER SNAP RING	1				



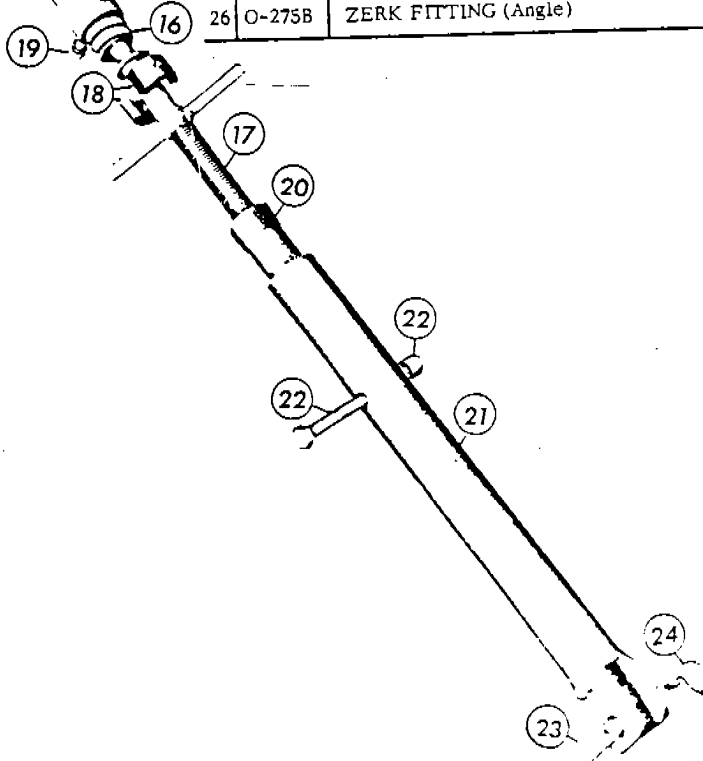
## CABLE TENSION ADJUSTING SHEAVE ASSEMBLY

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS



REF. NO.	PART NO.	NAME OF PART	NO. REQ.
14	PR-657A	TIGHTENER ARM BOLT NUT	1
15	PR-346	PRESSURE SPRING SLEEVE	1
16	F-252	PRESSURE SPRING	1
17	PR-347	PRESSURE ADJUSTER SCREW	1
18	PR-344	PRESSURE ADJUSTER GUIDE BUSHING	1
19	PR-344A	PRESSURE ADJUSTER GUIDE BUSHING CAP SCREW & LOCKWASHER	2
20	PR-349	PRESSURE ADJUSTER EXTENSION	1
21	PR-348	PRESSURE ADJUSTER BASE	1
22	PR-659	PRESSURE ADJUSTER BASE BOLT ASSY.	1
23	W-83	TAPER PIN (3/4")	2
24	W-83A	TAPER PIN SAFETY KEY	-
25	O-275	ZERK FITTING (Straight)	2
26	O-275B	ZERK FITTING (Angle)	1

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-13	CABLE TIGHTENER ARM	1
2	W-27	SHEAVE SHAFT	1
3	PR-310	SHEAVE	1
4	W-242	SHEAVE BEARING SNAP RING (Inner)	2
5	W-241	SHEAVE BEARING	2
6	W-240	SHEAVE BEARING SNAP RING (Outer)	1
7	W-27A	SHAFT RETAINER BOLT ASSY. (Bolt, 2 Flat Washers, Lockwasher & Nut)	1
8	PR-552	TIGHTENER ARM BEARING SPACER (Outer)	1
9	PR-551	TIGHTENER ARM BEARING SPACER (Inner)	1
10	PR-511	TIGHTENER ARM BEARING OUTER SLEEVE	2
11	PR-511A	TIGHTENER ARM BEARING INNER SLEEVE	2
12	PR-601	TIGHTENER ARM BEARING THRUST COLLAR	1
13	PR-657	TIGHTENER ARM BOLT	1





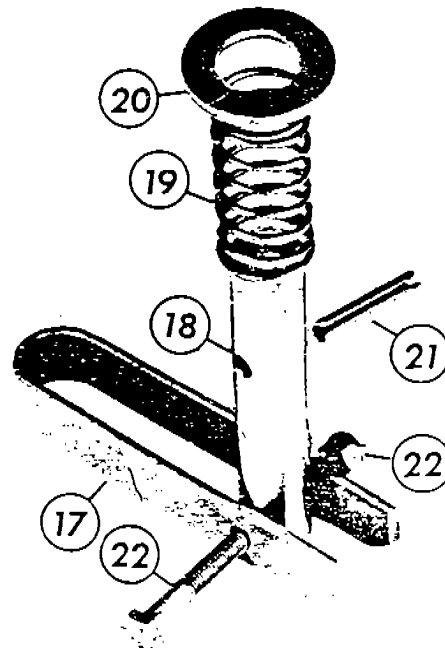




REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	W-11	WHEEL SWEEP	6
2	W-11A	WHEEL SWEEP	1
3	W-11B	WHEEL SWEEP	1
4	PR-513	SAFETY CABLE (3/8")	1
5	PR-518A	CABLE BINDER (With Hook)	1
6	PR-518	CABLE BINDER	2
7	PR-517	BRACE CABLE HOOK	2
8	PR-512	BRACE CABLE (3/8")	2
9	PR-623	CABLE CLAMP (3/8")	26
10	PR-319A	CROSS BRACE MASTER LINK ASSEMBLY (Outer)	1
	PR-319	CROSS BRACE MASTER LINK ASSEMBLY (Inner)	1

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
12	PR-624	SLACK CABLE SPRING	7
13	PR-625	SLACK CABLE (1/8")	7
14	PR-625A	CABLE CLAMP (Slack Cable) (1/8")	14
15	PR-28D	CROSS BRACE (Short)	4
16	PR-547	BRACE CABLE LINK	2
17	PR-556	CROSS BRACE LOCK PIN LEVER	8
18	PR-654	CROSS BRACE LOCK PIN	8
19	PR-656	CROSS BRACE LOCK PIN SPRING	8
20	PR-656A	LOCK PIN SPRING WASHER	8
21	PR-655	ROLL PIN	8
22	PR-556A	LOCK PIN LEVER BOLT ASSY.	8
*	PR-623A	CABLE THIMBLE (3/8" Ex. Hvy.)	7

NOTE:  
WHEN ORDERING PARTS REFER TO THE DIAGRAM TO  
DETERMINE THE PART NO. BY IT'S POSITION ON THE  
WHEEL.

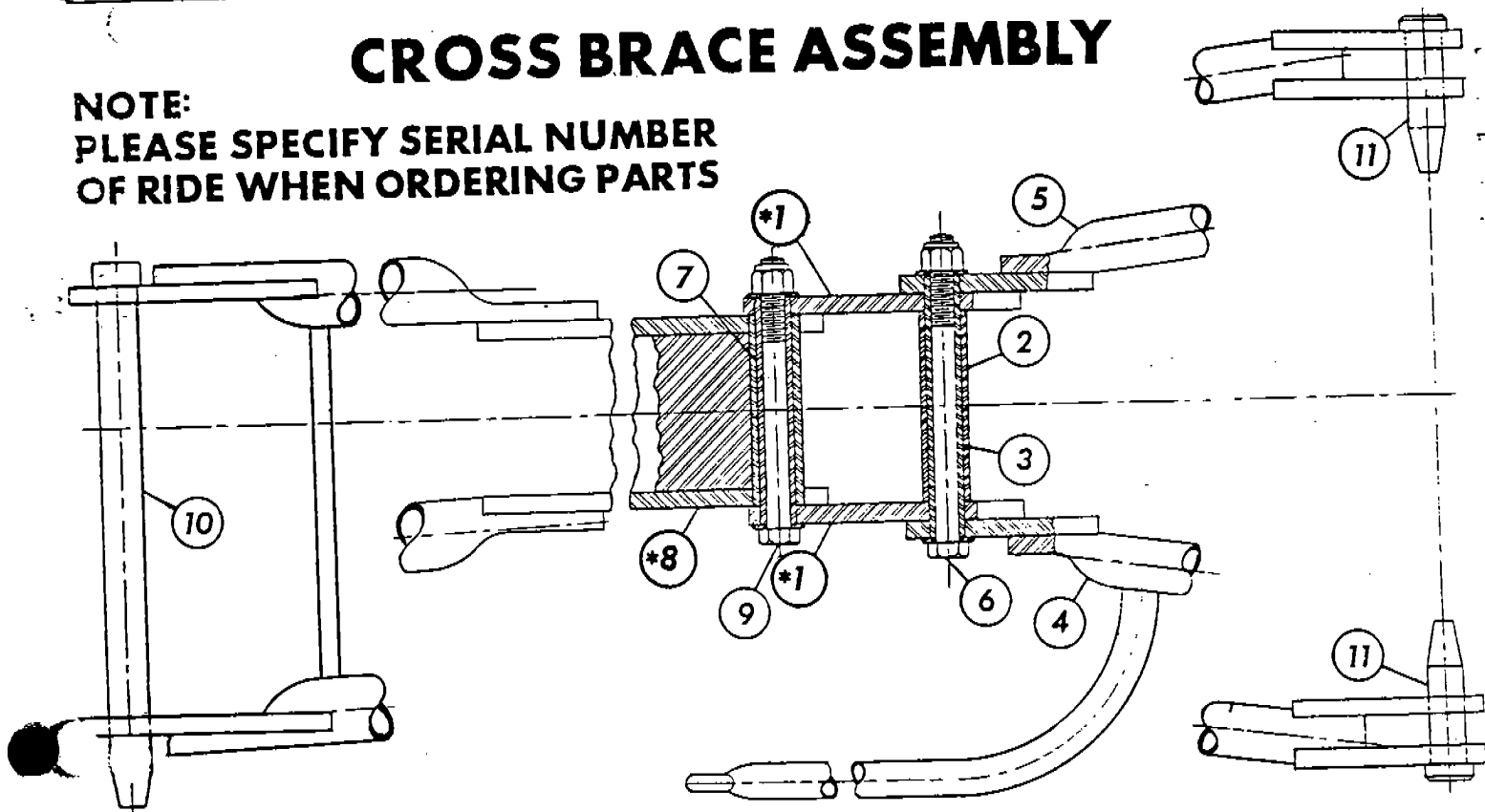




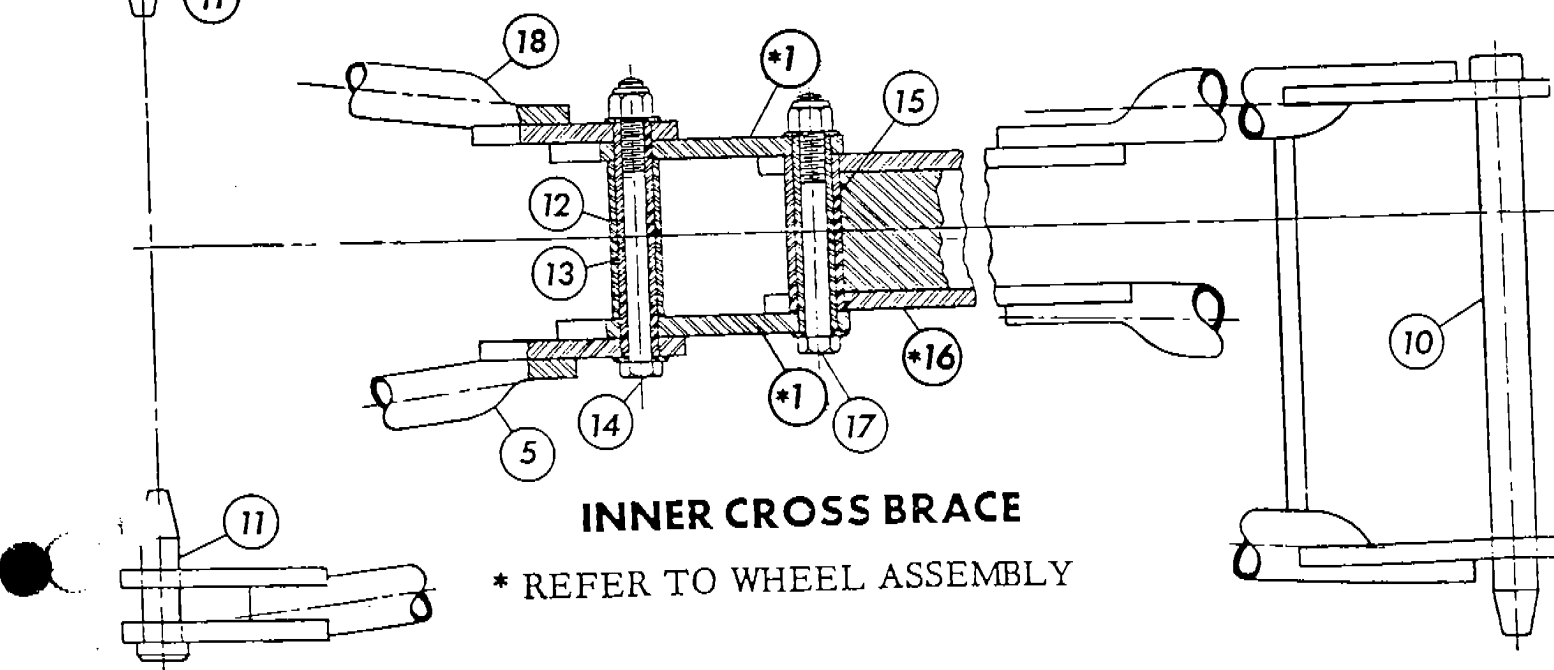


# CROSS BRACE ASSEMBLY

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS



**OUTER CROSS BRACE**



**INNER CROSS BRACE**

\* REFER TO WHEEL ASSEMBLY





## CROSS BRACE ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
*1	PR-74	CROSS BRACE LINK (Pr. R. H. & L. H. )	2
2	PR-558	OUTER CROSS BRACE SPACER	1
3	PR-594	OUTER CROSS BRACE BUSHING (Long)	1
4	PR-28A	OUTER CROSS BRACE (Short, with Extension)	1
5	PR-28C	CROSS BRACE (Short, R. H. )	2
6	PR-594A	OUTER CROSS BRACE BOLT ASSEMBLY (Long 1/2" X 6-1/2")	1
7	PR-560	OUTER CROSS BRACE BUSHING (Short)	1
8	PR-29	OUTER CROSS BRACE (Long)	1
9	PR-560A	OUTER CROSS BRACE BOLT ASSEMBLY (Short 1/2" X 6")	1

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
10	W-42	CROSS BRACE PIN (Long)	2
11	W-83	CROSS BRACE PIN (Short)	4
12	PR-559	INNER CROSS BRACE SPACER	1
13	PR-595	INNER CROSS BRACE BUSHING (Long)	1
14	PR-595A	INNER CROSS BRACE BOLT ASSEMBLY (Long 1/2" X 5-1/2")	1
15	PR-596	INNER CROSS BRACE BUSHING (Short)	1
*16	PR-30	INNER CROSS BRACE (Long)	1
17	PR-596A	INNER CROSS BRACE BOLT ASSEMBLY (Short 1/2" X 5")	1
18	PR-28B	INNER CROSS BRACE (Short, L. H. )	1

The No. Req. column indicates the number required for each pair of Cross Braces.

WHEN ORDERING CROSS BRACE LINKS (Part No. PR-74) AND INNER OR OUTER CROSS BRACES (Part No. PR-29 and 30) REFER TO WHEEL ASSEMBLY (Page 34) TO DETERMINE THE SUFFIX BY THEIR POSITION ON THE WHEEL.

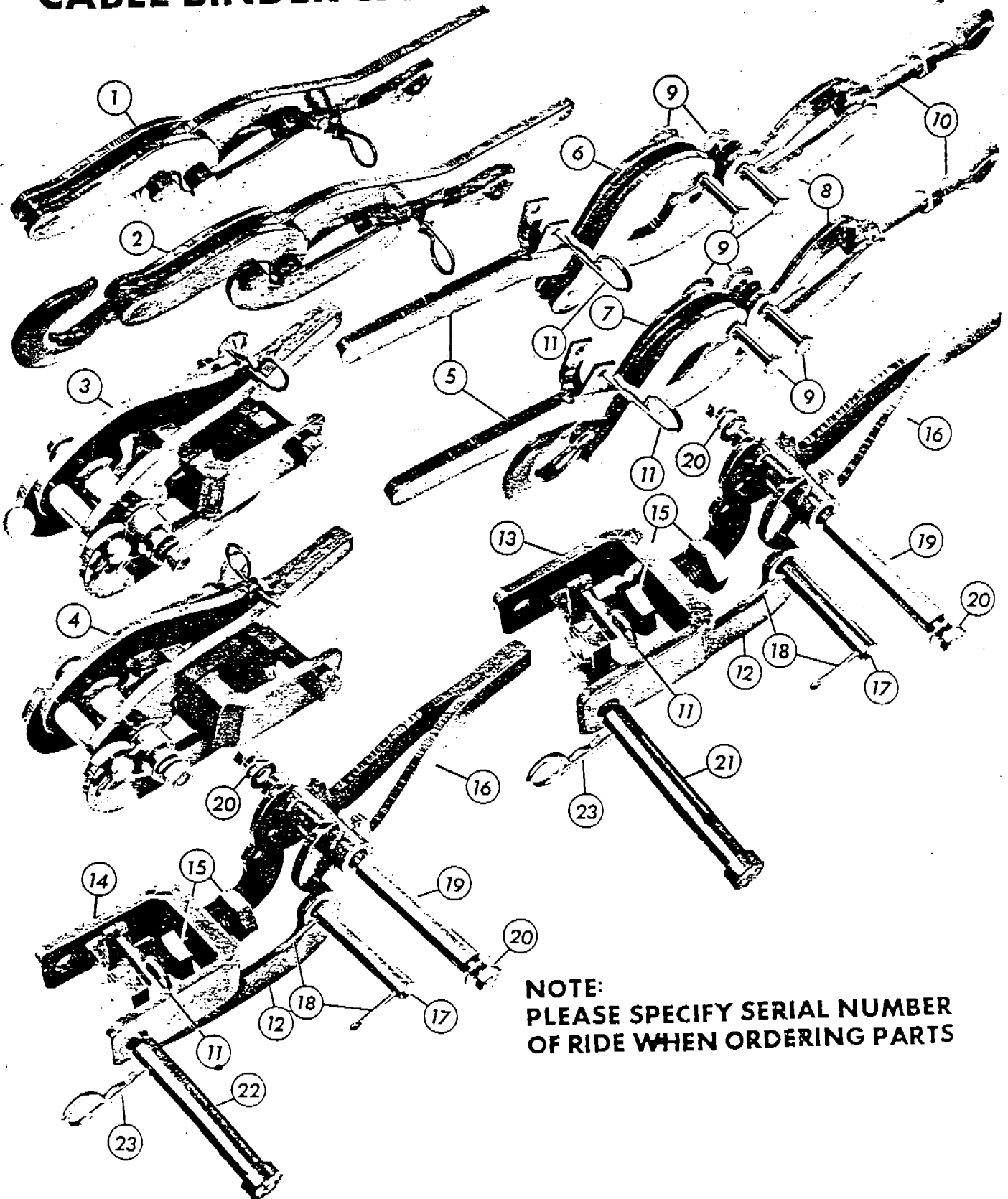
THE "L" & "S" OF THE PR-74 SUFFIX INDICATES LONG OR SHORT LINKS.

THE "O" & "I" OF THE PR-29 AND PR-30 INDICATES OUTER AND INNER CROSS BRACES.





# CABLE BINDER & MASTER LINK ASSEMBLIES



**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS





# CABLE BINDER & MASTER LINK ASSEMBLIES

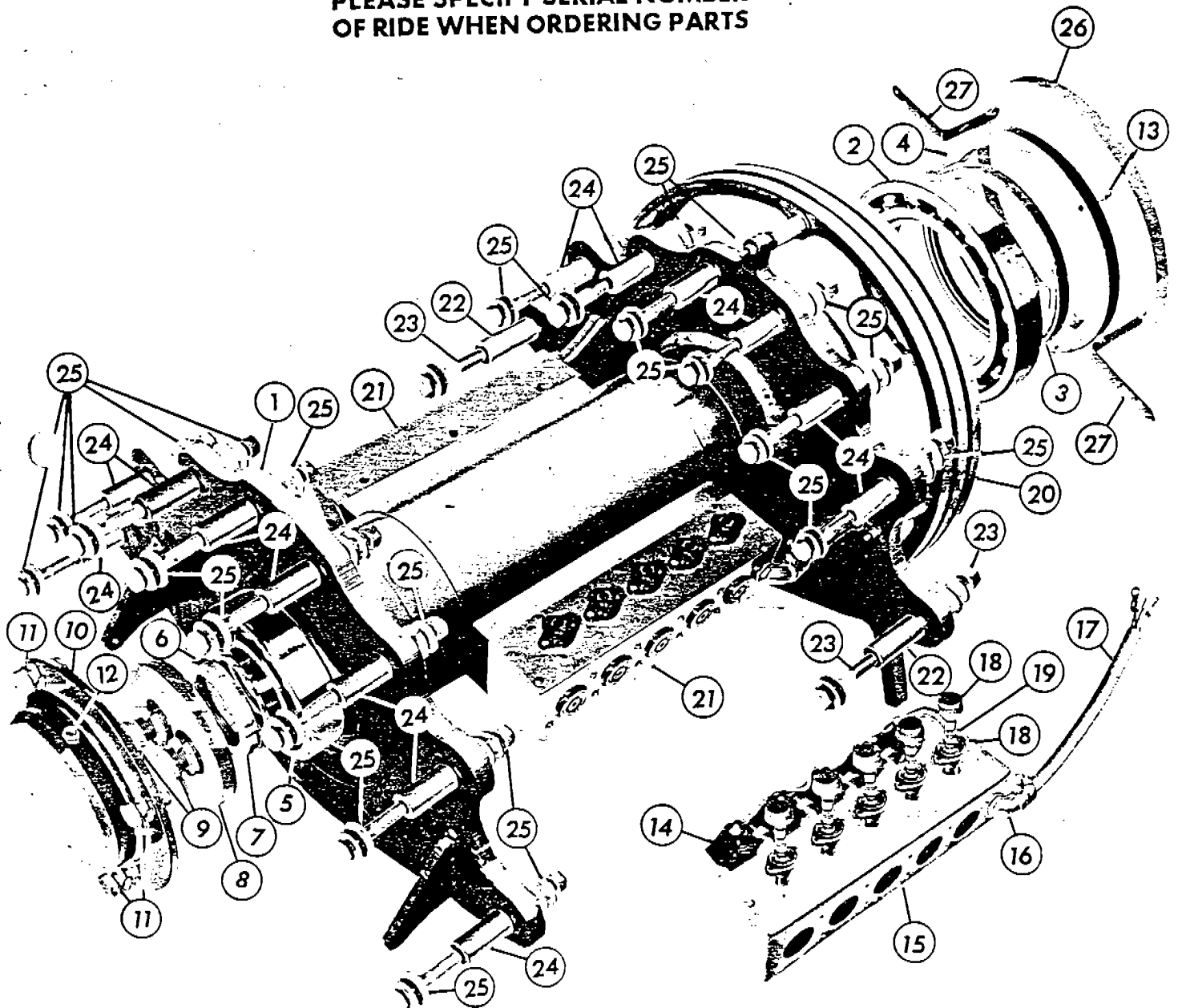
REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-518	CABLE BINDER ASSEMBLY	2	12	PR-321	MASTER LINK HOOK	2
2	PR-518A	CABLE BINDER ASSEMBLY (With Hook)	1	13	PR-322	MASTER LINK CLEVIS (Wide)	1
3	PR-319	CROSS BRACE MASTER LINK ASSEMBLY (Inner)	1	14	PR-322A	MASTER LINK CLEVIS (Narrow)	1
4	PR-319A	CROSS BRACE MASTER LINK ASSEMBLY (Outer)	1	15	PR-322E	MASTER LINK CLEVIS ADJUSTING NUT	4
5	PR-519	BINDER LEVER	3	16	PR-320	MASTER LINK LEVER	2
6	PR-534	BINDER LINK	2	17	PR-312	MASTER LINK PIN	2
7	PR-534A	BINDER LINK (With Hook)	1	18	PR-312A	MASTER LINK PIN COTTER KEY	4
8	PR-535	BINDER LINK (Adjustable)	3	19	PR-560	CROSS BRACE BUSHING	2
9	PR-597	BINDER LINK PIN ASSEMBLY	6	20	PR-560A	CROSS BRACE BUSHING BOLT ASSEMBLY	2
10	PR-536	BINDER EYE BOLT ASSEMBLY	3	21	PR-456	CROSS BRACE PIN (Long)	1
11	W-83A	SAFETY KEY	5	22	PR-455	CROSS BRACE PIN (Short)	1
				23	O-26A	SAFETY KEY	2





## WHEEL HUB ASSEMBLY

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS







# WHEEL HUB ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1.	PR-307A	WHEEL HUB.(Complete with Light Rings)	1	17	E-178	LIGHT CORD	2
1	PR-307	WHEEL HUB (Less Light Rings)	1	18	E-200	FUSE HOLDER ASSEMBLY	10
2	W-87	WHEEL HUB BEARING (Inner)	1	19	E-201	FUSE CARTRIDGE	10
3	W-88	WHEEL HUB BEARING GREASE SEAL	1	20	E-172	LIGHT RING ASSEMBLY	1
4	W-51	WHEEL HUB BEARING GREASE SEAL RING	1	21	E-198	LIGHT RECEPTACLE ASSEMBLY	2
5	RR-48A	WHEEL HUB BEARING (Outer)	1	22	PR-593	SWEEP BUSHING (Long)	2
6	W-85	WHEEL SPINDLE LOCKWASHER	1	23	PR-593A	SWEEP BUSHING BOLT ASSY. (Long)	2
7	W-84	WHEEL SPINDLE NUT	1	24	PR-557	SWEEP BUSHING (Short)	1+
8	W-278	SAFETY PLATE	1	25	PR-557A	SWEEP BUSHING BOLT ASSY. (Short)	1+
9	W-278A	SAFETY PLATE CAP SCREW	2	26	E-202	GROUND RING	1
10	W-298	WHEEL HUB CAP	1	27	E-202B	GROUND RING CONDUCTOR STRIP	2
	W-298A	WHEEL HUB CAP BOLT ASSEMBLY	4	*	E-202C	CONDUCTOR STRIP MACHINE SCREW	2
12	O-275	ZERK FITTING	1	*	E-202A	GROUND RING MACHINE SCREW & NUT	4
13	O-275A	ZERK FITTING (1/4")	1	*	E-200A	FUSE HOLDER MACHINE SCREW & NUT	20
14	E-72	LIGHT RECEPTACLE (Female)	10	*	E-72A	LIGHT RECEPTACLE MACHINE SCREW & WASHER	20
15	E-199	LIGHT RECEPTACLE BOX	2	*	E-198A	LIGHT RECEPTACLE METAL SCREW	12
16	E-177	LIGHT CORD CONNECTOR	2				

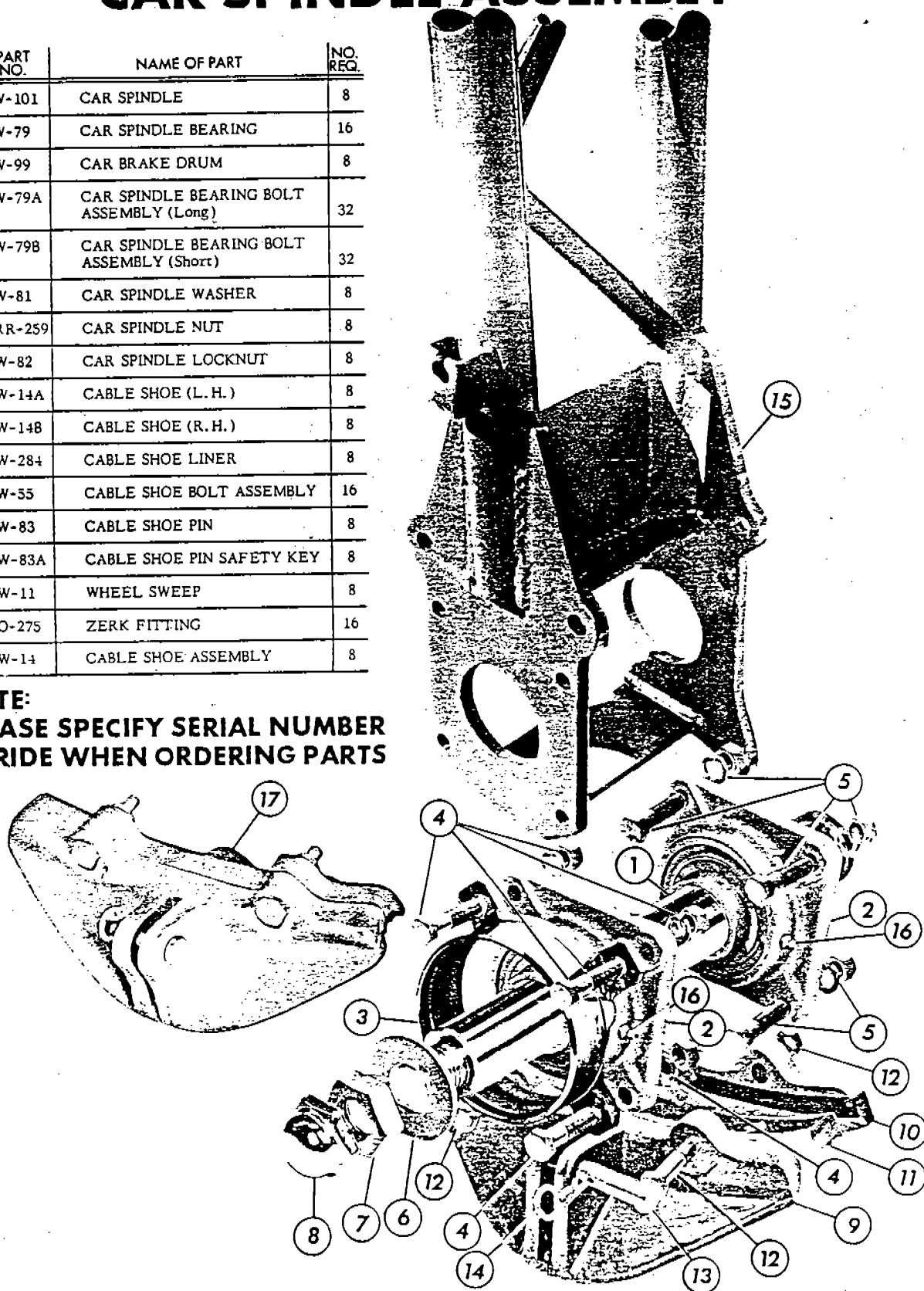
\* Not Illustrated.



## CAR SPINDLE ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	W-101	CAR SPINDLE	8
2	W-79	CAR SPINDLE BEARING	16
3	W-99	CAR BRAKE DRUM	8
4	W-79A	CAR SPINDLE BEARING BOLT ASSEMBLY (Long)	32
5	W-79B	CAR SPINDLE BEARING BOLT ASSEMBLY (Short)	32
6	W-81	CAR SPINDLE WASHER	8
7	RR-259	CAR SPINDLE NUT	8
8	W-82	CAR SPINDLE LOCKNUT	8
9	W-14A	CABLE SHOE (L. H.)	8
10	W-14B	CABLE SHOE (R. H.)	8
11	W-284	CABLE SHOE LINER	8
12	W-55	CABLE SHOE BOLT ASSEMBLY	16
13	W-83	CABLE SHOE PIN	8
14	W-83A	CABLE SHOE PIN SAFETY KEY	8
15	W-11	WHEEL SWEEP	8
16	O-275	ZERK FITTING	16
17	W-14	CABLE SHOE ASSEMBLY	8

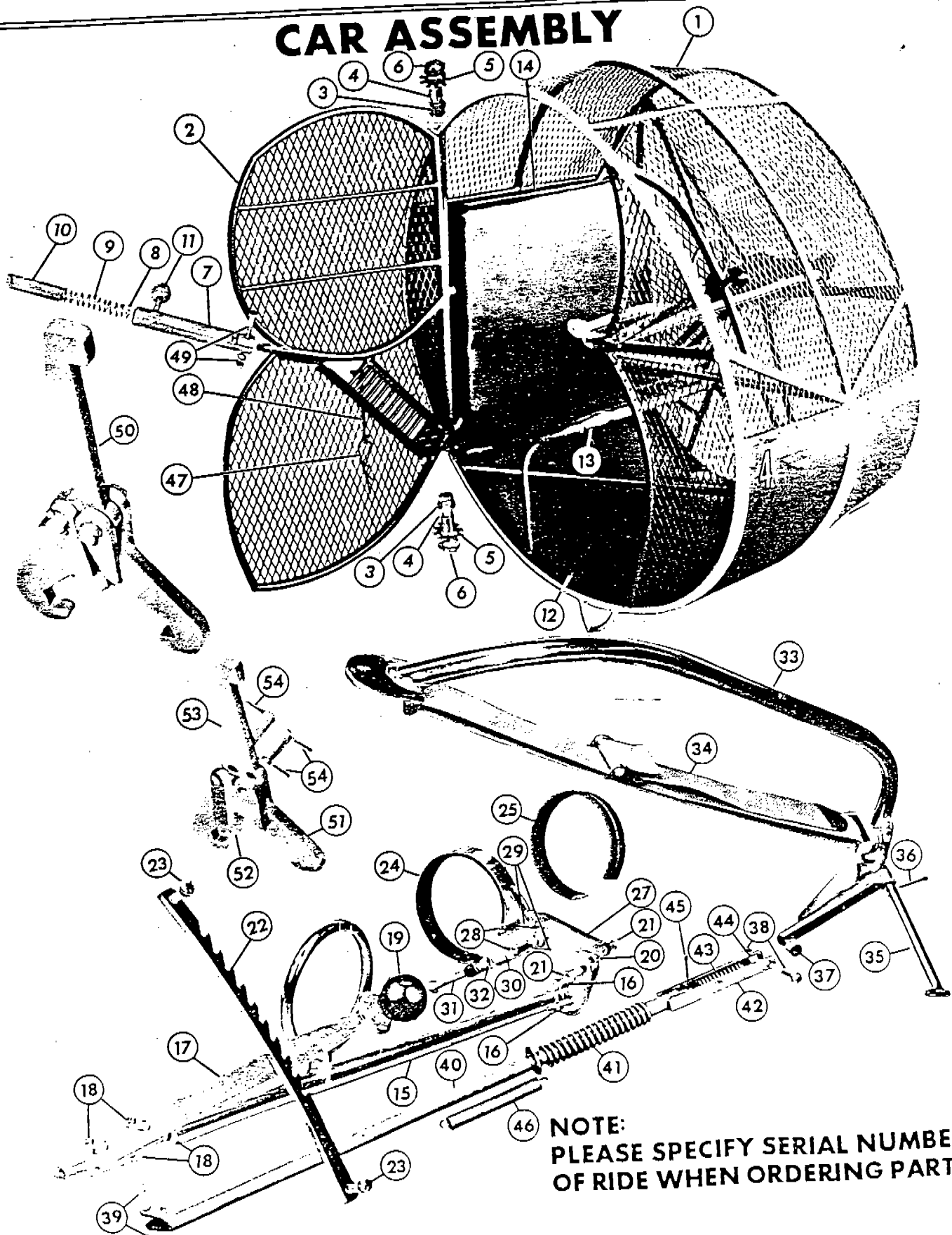
**NOTE:**  
**PLEASE SPECIFY SERIAL NUMBER**  
**OF RIDE WHEN ORDERING PARTS**







# CAR ASSEMBLY





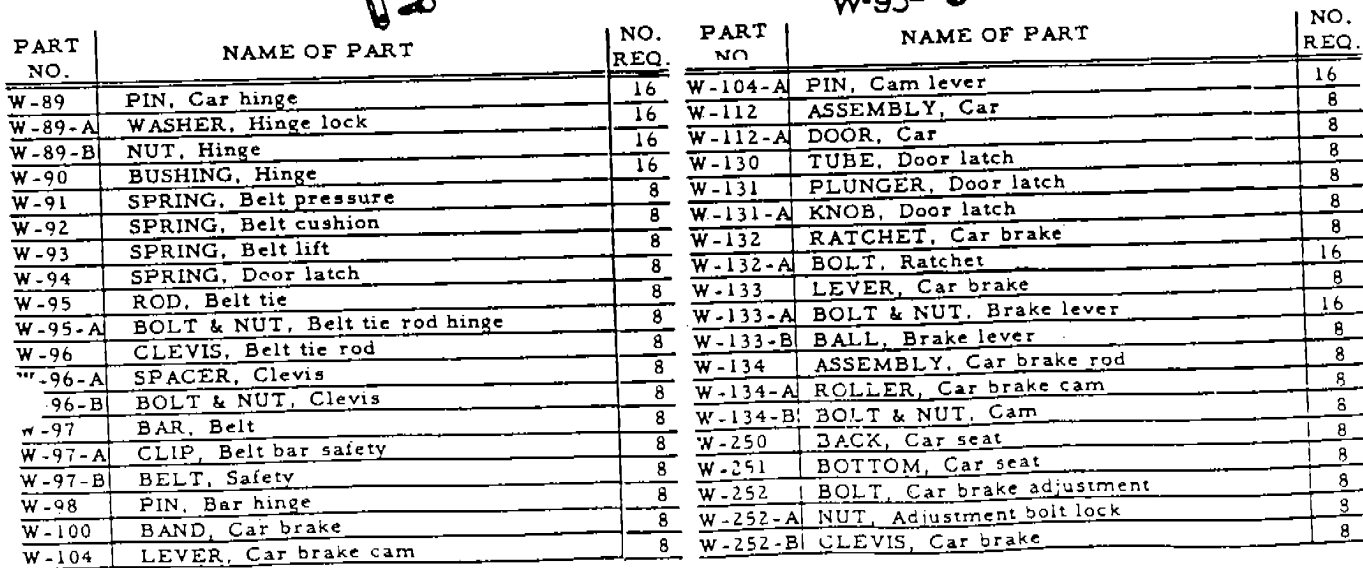


# CAR ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	W-112S	CAR ASSEMBLY (Complete)	1	30	O-294	CAR BRAKE CLEVIS	1
2	W-112AS	CAR DOOR ASSEMBLY	1	31	W-305	CAR BRAKE ADJUSTING BOLT	1
3	W-90	CAR DOOR HINGE BUSHING	2	32	W-252A	CAR BRAKE ADJUSTING BOLT LOCKNUT	1
4	W-89	CAR DOOR HINGE PIN.	2	33	W-97	CAR BELT BAR	1
5	W-89A	CAR DOOR HINGE LOCKWASHER	2	34	W-97B	CAR SAFETY BELT	1
6	W-89B	CAR DOOR HINGE NUT	2	35	W-98	CAR BELT BAR HINGE PIN	1
7	W-130	CAR DOOR LATCH TUBE	1	36	W-98A	CAR BELT BAR HINGE PIN COTTER KEY	1
8	W-130B	CAR DOOR LATCH TUBE WASHER	1	37	W-96A	CAR BELT TIE ROD CLEVIS SPACER	1
9	W-94	CAR DOOR LATCH SPRING	1	38	W-96B	CAR BELT TIE ROD CLEVIS BOLT ASSY.	1
10	W-131	CAR DOOR LATCH PLUNGER	1	39	W-95A	CAR BELT TIE ROD HINGE BOLT ASSY.	1
11	W-131A	CAR DOOR LATCH KNOB ASSEMBLY	1	40	W-95	CAR BELT TIE ROD	1
12	W-364	CAR FLOOR BOARD	1	41	W-91	CAR BELT TIE ROD PRESSURE SPRING	1
13	W-251	CAR SEAT UPHOLSTERY	1	42	W-96	CAR BELT TIE ROD CLEVIS	1
14	W-250	CAR SEAT BACK UPHOLSTERY	1	43	W-92	CAR BELT TIE ROD CUSHION SPRING	1
15	W-134	CAR BRAKE ROD	1	44	W-362	CAR BELT TIE ROD CLEVIS RETAINER	1
16	W-134C	CAR BRAKE ROD BOLT ASSEMBLY	2	45	W-362A	CAR BELT TIE ROD CLEVIS RETAINER COTTER KEY	1
17	W-133	CAR BRAKE LEVER	1	46	W-93	CAR BELT TIE ROD LIFT SPRING	1
18	W-133A	CAR BRAKE LEVER BOLT ASSEMBLY	2	47	W-97A	CAR BELT BAR SAFETY KEY	1
19	O-189	CAR BRAKE LEVER BALL	1	48	W-97C	CAR BELT BAR SAFETY KEY STRAP	1
20	W-302	CAR BRAKE CAM ROLLER	1	49	W-130A	LATCH TUBE BOLT ASSEMBLY	1
21	W-134B	CAR BRAKE CAM ROLLER BOLT ASSY.	1	50	PR-756	CAR PULLER ASSEMBLY	1
22	W-132	CAR BRAKE RATCHET	1	51	PR-757	CAR PULLER JAW	1
23	W-132A	CAR BRAKE RETCHET BOLT ASSEMBLY	2	52	PR-759	CAR PULLER PLUNGER	1
24	W-100	CAR BRAKE BAND ASSY. (With Lining)	1	53	PR-760	CAR PULLER LEVER	1
25	W-100A	CAR BRAKE LINING	1	54	PR-761	CAR PULLER PIN w/ROLL PINS	4
27	W-104	CAR BRAKE CAM LEVER	1	*	W-373	CAR COVER	1
28	O-294A	CAR BRAKE CAM LEVER PIN	2	*	O-179	SEAT UPHOLSTERY CLAMP	4
29	O-294B	CAR BRAKE CAM LEVER PIN COTTER KEY					

\* Not Illustrated. \*\* Number Required Per Car.



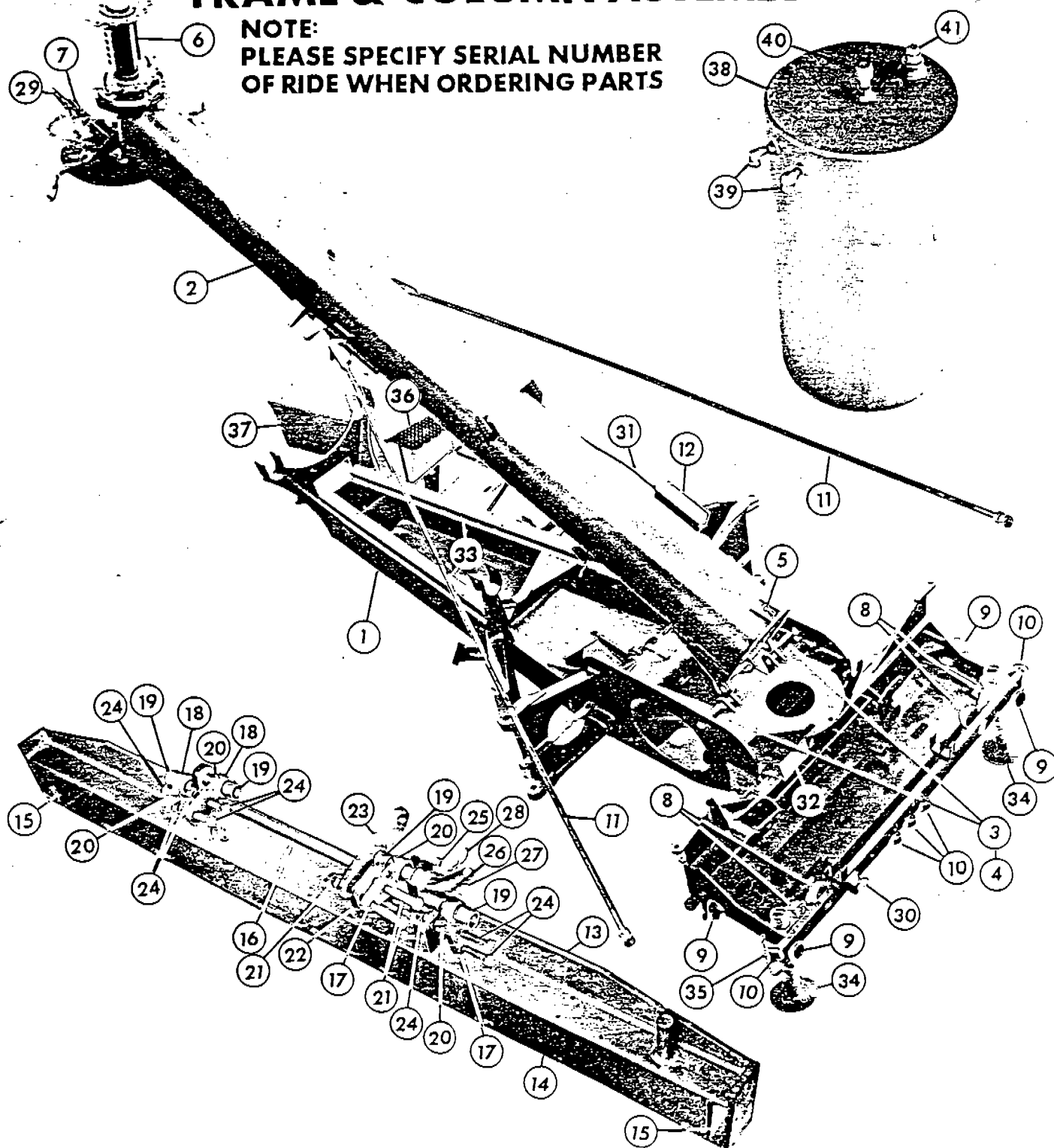






## FRAME & COLUMN ASSEMBLIES

**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS







# FRAME & COLUMN ASSEMBLIES

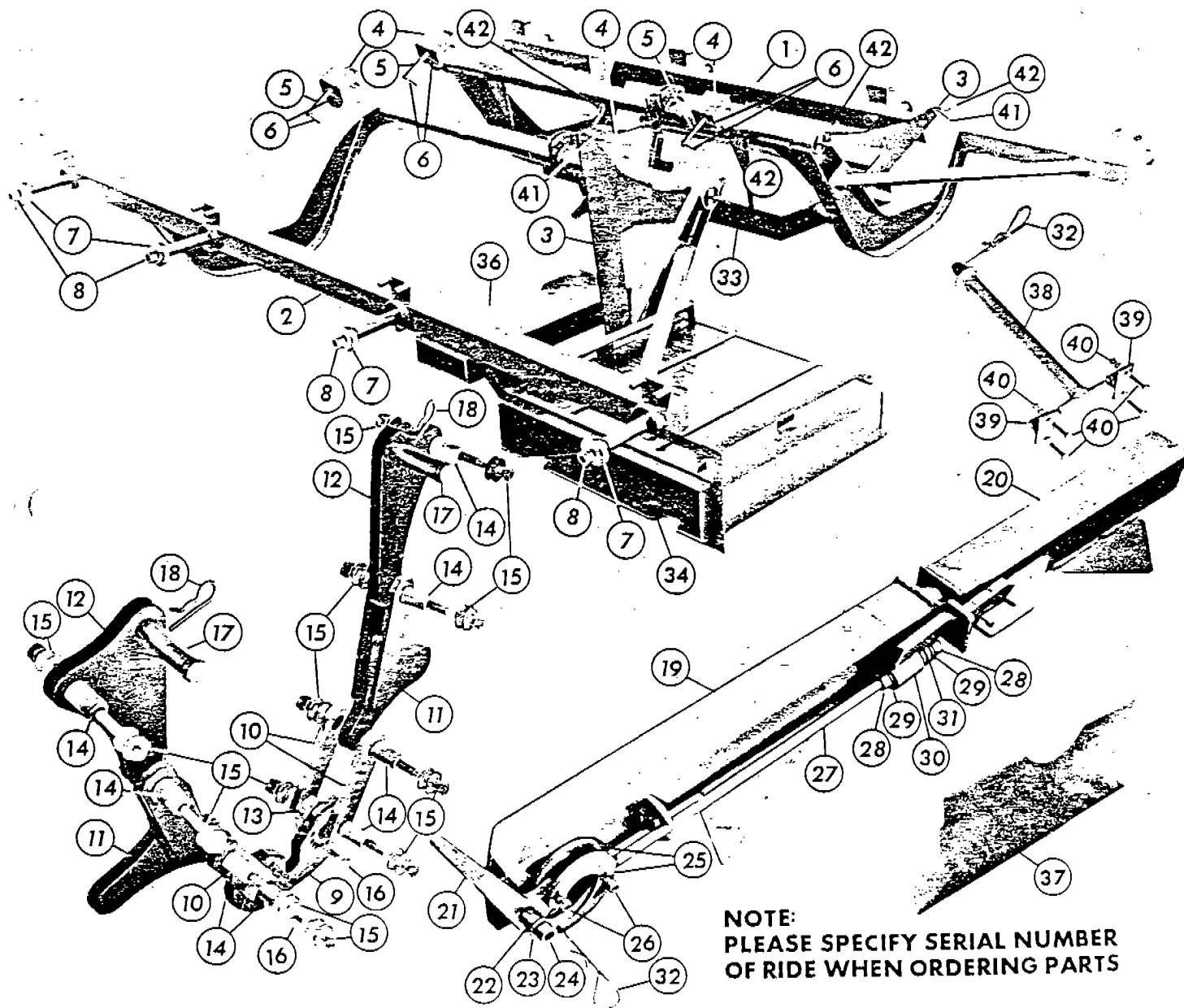
REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-1	FRAME	1	33	PR-476	OIL LINE GUARD	2
2	PR-24	COLUMN	1	34	PR-323	STEADY FOOT	2
3	PR-56	COLUMN HINGE PIN	2	35	PR-409	REAR SUPPORT PIN ASSEMBLY	2
4	O-275B	COLUMN HINGE PIN ZERK FITTING	2	36	PR-652	FRONT BELT GUARD	1
5	PR-24A	COLUMN HOLD-DOWN BOLT ASSEMBLY	1	37	L-288A	TOOL BOX (Plain)	1
6	PR-602	WHEEL HUB ASSEMBLY	1	38	PR-404	OIL TANK	1
7	L-487	AIR COUPLER	2	39	PR-500	3/8" STREET ELL (Hyd.)	2
8	E-136	STOP, TURN & TAIL LIGHT ASSEMBLY	4	40	L-212 A	BREATHER	1
9	E-137R	REFLECTOR (Red)	4	41	PR-404B	1" PIPE PLUG	1
10	E-135	ARMORED MARKER LIGHT ASSEMBLY	5	*	PR-751	DRAIN PLUG (1/2" Pipe Plug)	1
11	PR-23	COLUMN TIE ROD ASSEMBLY	2	*	PR-652A	FRONT BELT GUARD BOLT ASSEMBLY	1
12	E-181	COLUMN CIRCUIT BREAKER ASSEMBLY	1	*	PR-644A	CONTROL VALVE GUARD BOLT ASSY.	2
13	PR-177	SWEEP SUPPORT	1	*	PR-476A	OIL LINE GUARD BOLT ASSEMBLY	6
14	PR-177A	SWEEP SUPPORT PAD (Long)	1	*	PR-177D	SWEEP SUPPORT PAD SCREW ASSEMBLY	22
15	PR-177B	SWEEP SUPPORT PAD (Short)	2	*	E-137B	REFLECTOR MACHINE SCREW ASSY.	8
16	PR-529	SWEEP SUPPORT LEVER	1	*	E-146A	LICENSE PLATE LIGHT BOLT ASSEMBLY	2
17	PR-532	SWEEP SUPPORT BEARING (R. H.)	2	*	PR-5	FENDER	2
18	PR-532A	SWEEP SUPPORT BEARING (L. H.)	2	*	O-630	SPUD WRENCH (1-1/8")	1
19	PR-532B	BUSHING	4	*	O-228	SCREW DRIVER (6")	1
20	O-275A	ZERK FITTING	4	*	O-248	HAMMER (3# Cross Peen)	1
21	PR-178A	SWEEP SUPPORT LOCK PLATE BOLT ASSY.	2	*	O-249	PLIERS (8")	1
22	PR-713	SWEEP SUPPORT LOCK PLATE SPACER	1	*	O-486	DIAGONALS (7")	1
23	PR-178	SWEEP SUPPORT PLATE	1	*	O-588	DRIFT PUNCH (3/4")	1
24	PR-177C	SWEEP SUPPORT BEARING BOLT ASSY.	6	*	O-247	CRESCENT (8")	1
25	PR-714	SWEEP SUPPORT LOCK PLATE ROLLER	1	*	O-247A	CRESCENT (12")	1
26	PR-714A	SWEEP SUPPORT LOCK PLATE ROLLER BOLT ASSEMBLY	1	*	W-372	CRESCENT (16")	1
27	W-83	SWEEP SUPPORT LOCK PLATE PIN	1	*	PR-732	SOCKET (1-1/2", 3/4" Drive)	1
28	W-83A	SWEEP SUPPORT LOCK PLATE PIN SAFETY KEY	1	*	PR-733	RATCHET (3/4")	1
29	L-456D	AIR COUPLER DUMMY	2	*	PR-734	SOCKET (1-5/8", 3/4" Drive)	1
30	E-146	LICENSE PLATE LIGHT ASSEMBLY	1	*	O-227	ALLEN WRENCHES (Set of 4)	1
31	PR-618	CONDUIT ASSEMBLY	1	*	O-587	OIL CAN	1
32	PR-644	HYDRAULIC CONTROL VALVE GUARD	1	*	PR-735	BOX END WRENCH (1-1/2")	1
				*	PR-751	HOSE CLAMP	1
				*	PR-755	SISSOR TIGHTENING WRENCH	1

\* Not Illustrated.





## BUNKER ASSEMBLY

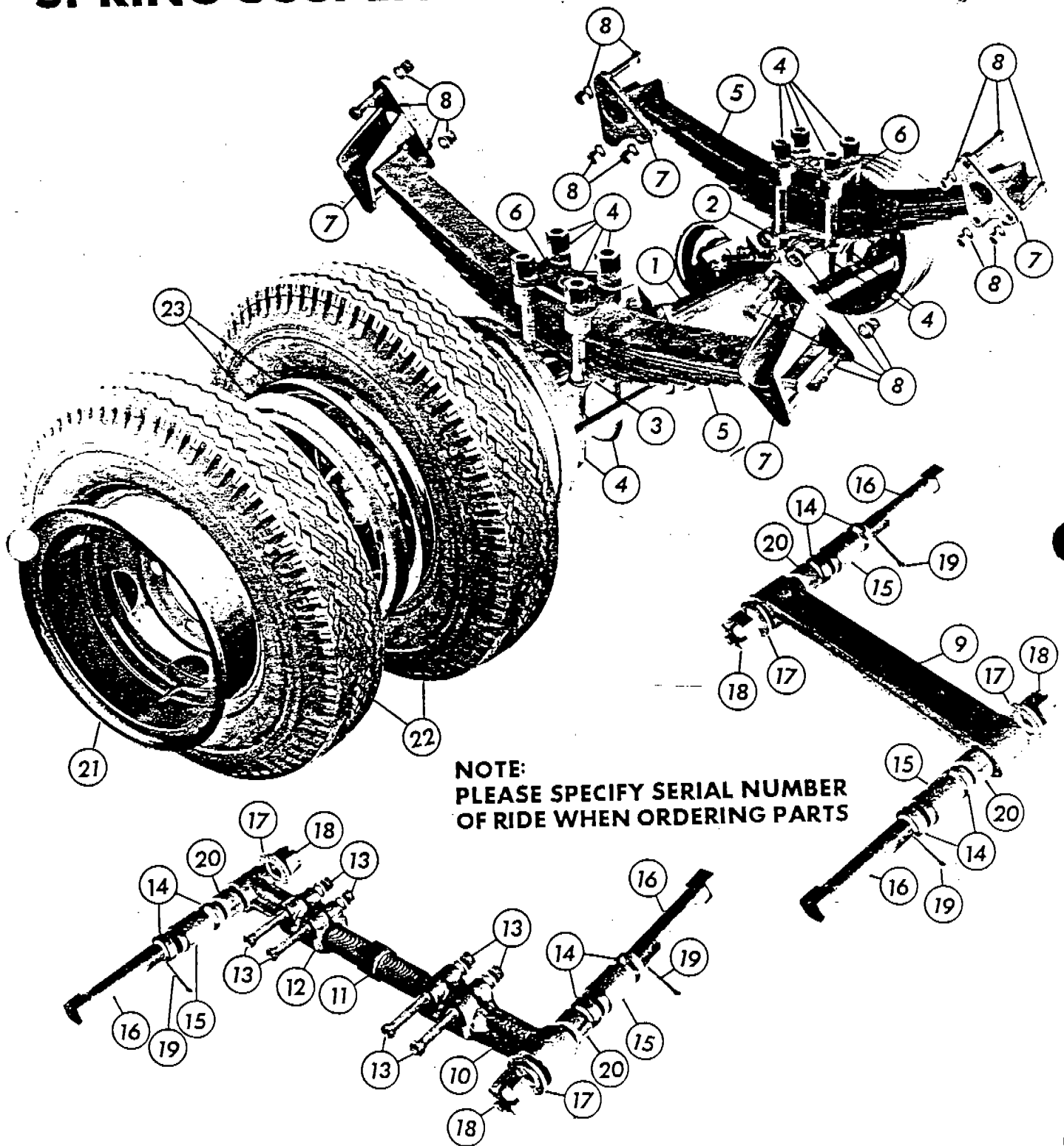


**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS





# SPRING SUSPENSION & TIRE ASSEMBLY







# SPRING SUSPENSION & TIRE ASSEMBLY

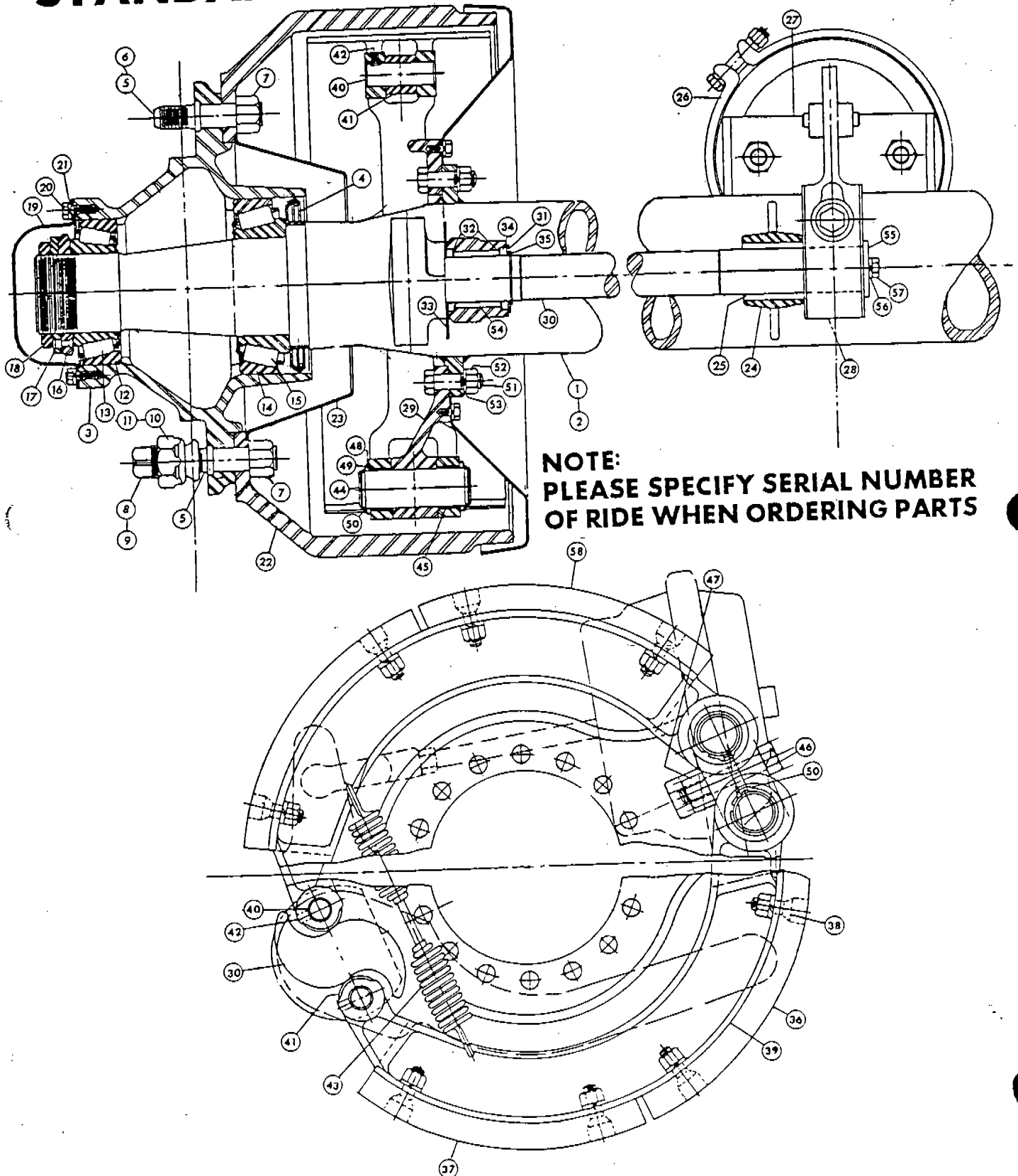
REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-18 (S-700)	AXLE (With Nuts & Washers 72" Track)	1	13	PR-725A	ADJUSTABLE TIE ROD BOLT ASSY.	4
2	PR-717R	SPRING SEAT (R. H.)	1	14	PR-728	RUBBER BUSHING CAP	8
3	PR-717L	SPRING SEAT (L. H.)	1	15	PR-729	RUBBER BUSHING	4
4	PR-708	"U" BOLT ASSEMBLY	4	16	PR-730	TIE ROD BOLT	4
5	PR-22	SPRING	2	17	PR-730A	TIE ROD BOLT WASHER	4
6	PR-716	SPRING SEAT CAP	2	18	PR-730B	TIE ROD BOLT NUT	4
7	PR-3	SPRING BRACKET	4	19	PR-730C	TIE ROD BOLT COTTER KEY	4
8	PR-3A	SPRING BRACKET BOLT ASSEMBLY	12	20	PR-731	TIE ROD SLEEVE	4
9	PR-724	AXLE TIE ROD	1	21	PR-19	WHEEL	4
10	PR-725	ADJUSTABLE TIE ROD END (R. H.)	1	22	PR-20	TIRE	4
11	PR-726	ADJUSTING SCREW	1	23	PR-19A	WHEEL RIM	4
12	PR-727	ADJUSTABLE TIE ROD END (L. H.)	1	*	PR-21	TUBE	4

\* Not Illustrated.





# STANDARD AXLE & BRAKE ASSEMBLY







# STANDARD AXLE & BRAKE ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	S-700 (PR-18)	AXLE (With Nuts & Washers, 72" Track)	1	30.	UB-5006-2 R. H. & L. H.	CAM & SHAFT, 20-5/16" Under Head of Cam to end of Splines	1 Ea.
2	S-700-F	AXLE (With Brake Flanges Attached, 72" Track, 7" Brakes)	1	31	UB-5015	CAM SHAFT RETAINER WASHER	2
3	A-170046-1	HUB	2	32	UB-1017	CAM SHAFT RETAINER WASHER	4
4	A-150039	GREASE RETAINER ASSEMBLY	2	33	UB-5014	CAM SPACER WASHER	2
5	13096	WHEEL STUD (R. H.)	10	34	UB-1014	CAM RETAINER FELT	4
6	13097	WHEEL STUD (L. H.)	10	35	UB-1019	CAM SHAFT LOCK RING	2
7	6307	WHEEL STUD NUT	20	36	UB-5024	BRAKE LINING (Anchor Pin End)	4
8	10708	INNER CAP NUT (R. H.)	10	37	UB-5025	BRAKE LINING (Cam End)	4
9	10709	INNER CAP NUT (L. H.)	10	38	6419	BRAKE LINING RIVET	32
10	37891	OUTER CAP NUT (R. H.)	10	39	UB-5027-1	BRAKE SHOE	4
11	37892	OUTER CAP NUT (L. H.)	10	40	UB-5009	BRAKE ROLLER SHAFT	4
12	HM-212011	BEARING CUP (Outer)	2	41	UB-1006-1	BRAKE CAM ROLLER	4
13	HM-212049	BEARING CONE (Outer)	2	42	6801	ROLLER SHAFT SET SCREW	4
14	653	BEARING CUP (Inner)	2	43	UB-1021	BRAKE RETRACT SPRING	2
15	663	BEARING CONE (Inner)	2	44	UB-1008-2	ANCHOR PIN	4
16	A-150032-B	SPINDLE NUT (Inner)	2	45	UB-1024	BRAKE SHOE BUSHING	8
17	A-150034	SPINDLE NUT LOCK	2	46	6225	BRAKE SPIDER CLAMP BOLT	2
18	A-150033	SPINDLE NUT (Outer)	2	47	6343	CLAMP BOLT NUT	2
19	A-170074	HUB CAP	2	48	UB-1012	ANCHOR PIN FELT	8
20	6203	HUB CAP BOLT	12	49	UB-1004	ANCHOR PIN RETAINER WASHER	8
21	6501	HUB CAP BOLT LOCKWASHER	12	50	UB-1013	ANCHOR PIN LOCK	8
22	UB-1180	BRAKE DRUM	2	51	6114	BRAKE MOUNTING BOLT	32
23	UB-1089	OIL SLING	2	52	6304	MOUNTING BOLT NUT	32
24	UB-1095	CAM SHAFT BRACKET (With Bushing)	2	53	6504	LOCKWASHER	32
25	UB-1179	CAM SHAFT BRACKET BUSHING	2	54	UB-1178	BRAKE SPIDER BUSHING	2
26	UB-1052	AIR CHAMBER	2	55	UB-2215	CAM SHAFT WASHER	2
27	UB-1119	AIR CHAMBER BRACKET	2	56	6501	LOCKWASHER	2
28	UB-1081	SLACK ADJUSTER	2	57	6203	CAM WASHER SET SCREW	2
29	UB-1131	SPIDER ASSEMBLY	2	58	UB-5021	SHOE & LINING ASSEMBLY, Complete with Linings, Bushings, Roller & Shaft	4

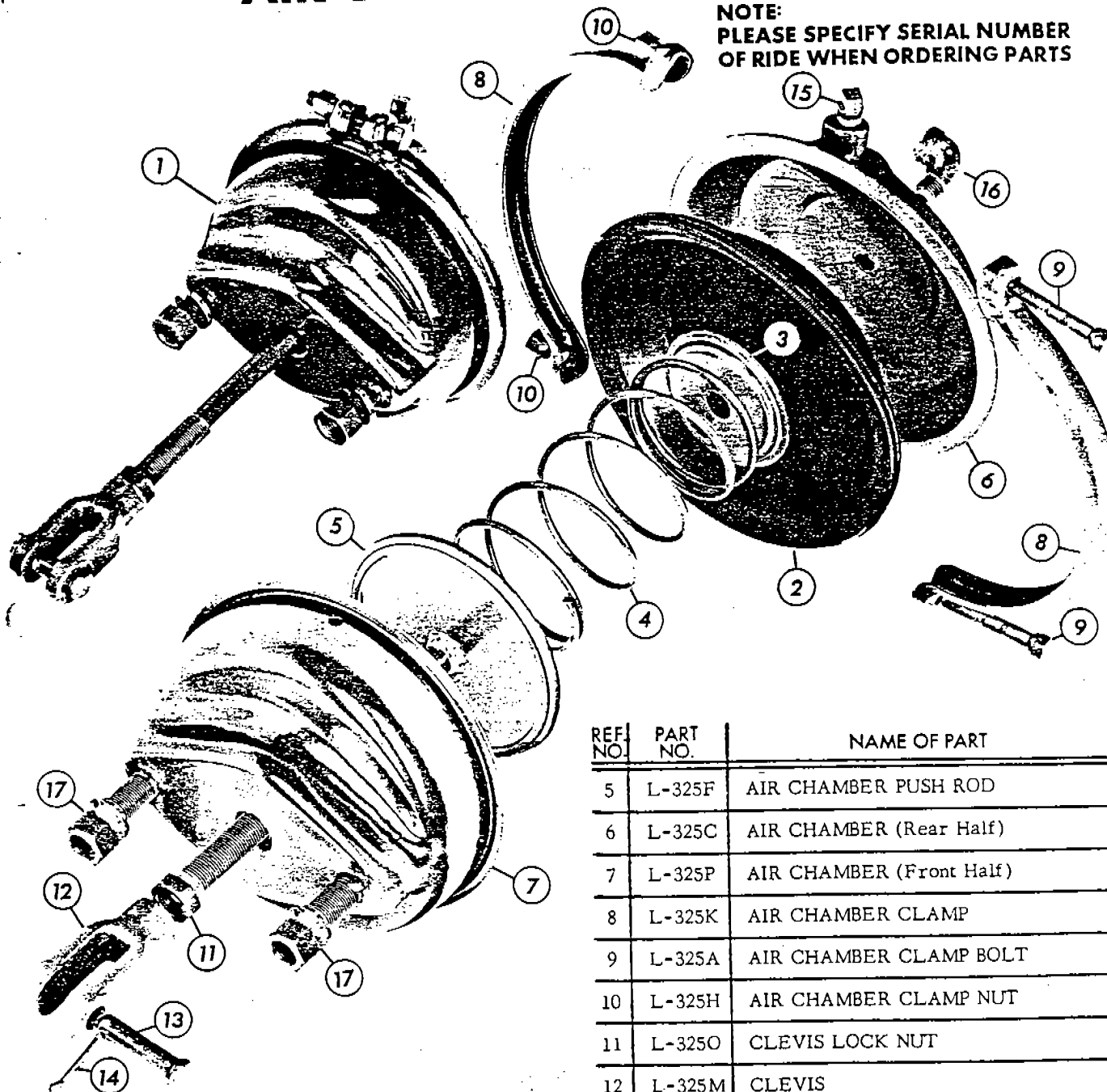
NOTE: STANDARD AXLE PART NUMBERS ARE INDICATED





# AIR CHAMBER ASSEMBLY

NOTE:  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

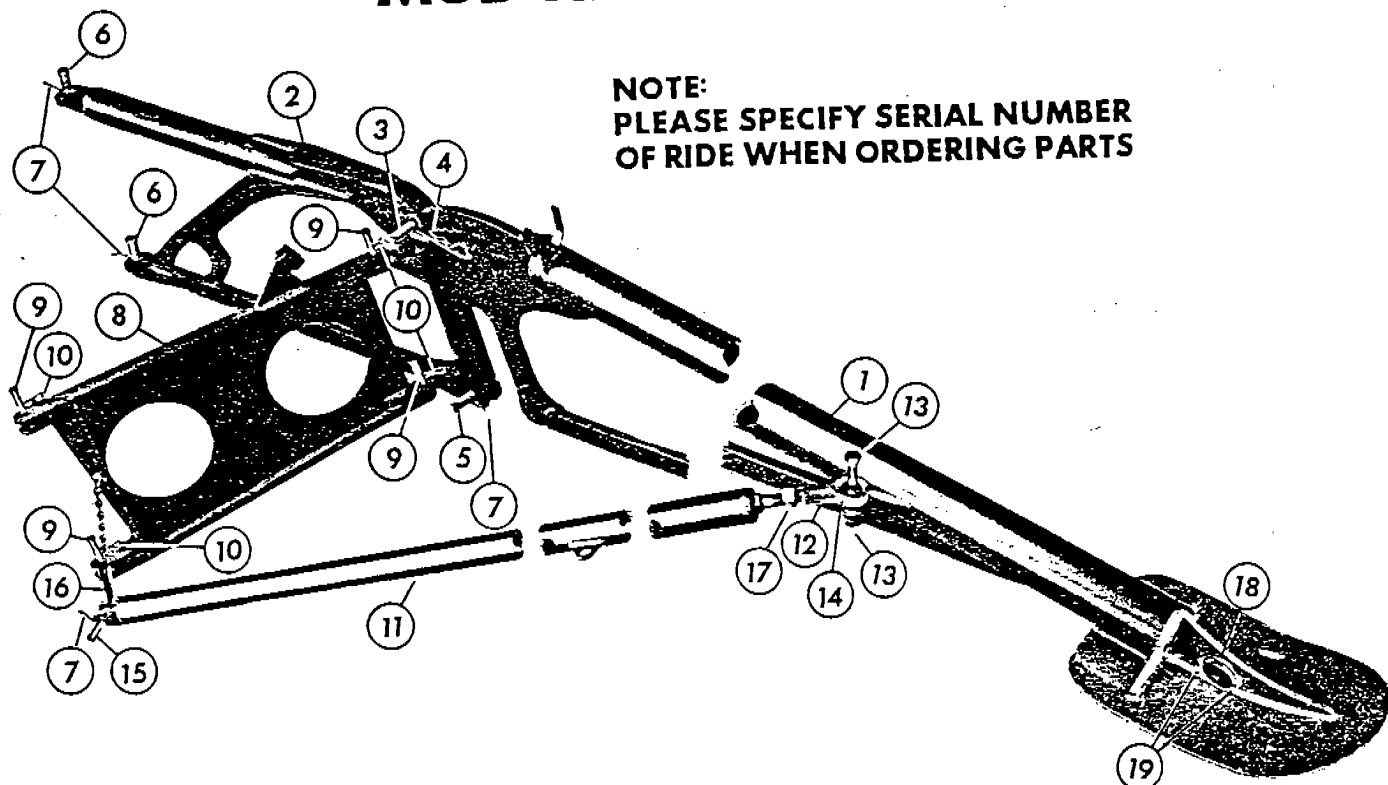


REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	L-325	AIR CHAMBER ASSEMBLY	2
	L-325D	AIR CHAMBER DIAPHRAGM	2
3	L-325-I	AIR CHAMBER SPRING PLATE	2
4	L-325E	AIR CHAMBER RETURN SPRING	2

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
5	L-325F	AIR CHAMBER PUSH ROD	2
6	L-325C	AIR CHAMBER (Rear Half)	2
7	L-325P	AIR CHAMBER (Front Half)	2
8	L-325K	AIR CHAMBER CLAMP	4
9	L-325A	AIR CHAMBER CLAMP BOLT	4
10	L-325H	AIR CHAMBER CLAMP NUT	4
11	L-325O	CLEVIS LOCK NUT	2
12	L-325M	CLEVIS	2
13	L-325G	CLEVIS PIN	2
14	L-325N	CLEVIS PIN COTTER KEY	2
15	L-325J	PIPE PLUG	2
16	L-325L	STREET ELL	2
17	L-325B	AIR CHAMBER NUT & LOCKWASHER	4



## MUD SILL ASSEMBLY



**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

REF. NO.	PART NO.	NAME OF PART	INO. REQ.
1	PR-6	OUTER MUD SILL (R. H.)	1
2	PR-138	INNER MUD SILL (R. H.)	1
3	PR-653	MUD SILL LOCK PIN	2
4	W-97A	MUD SILL LOCK PIN SAFETY KEY	2
5	PR-674	MUD SILL HINGE PIN	2
6	PR-185	INNER MUD SILL PIN	4
7	PR-185A	COTTER KEY	6
8	PR-146	MUD SILL GATE (R. H.)	1
9	O-26	UNIVERSAL TAPER PIN	8
10	O-26A	UNIVERSAL TAPER PIN SAFETY KEY	8
11	PR-142	MUD SILL BRACE ROD	2

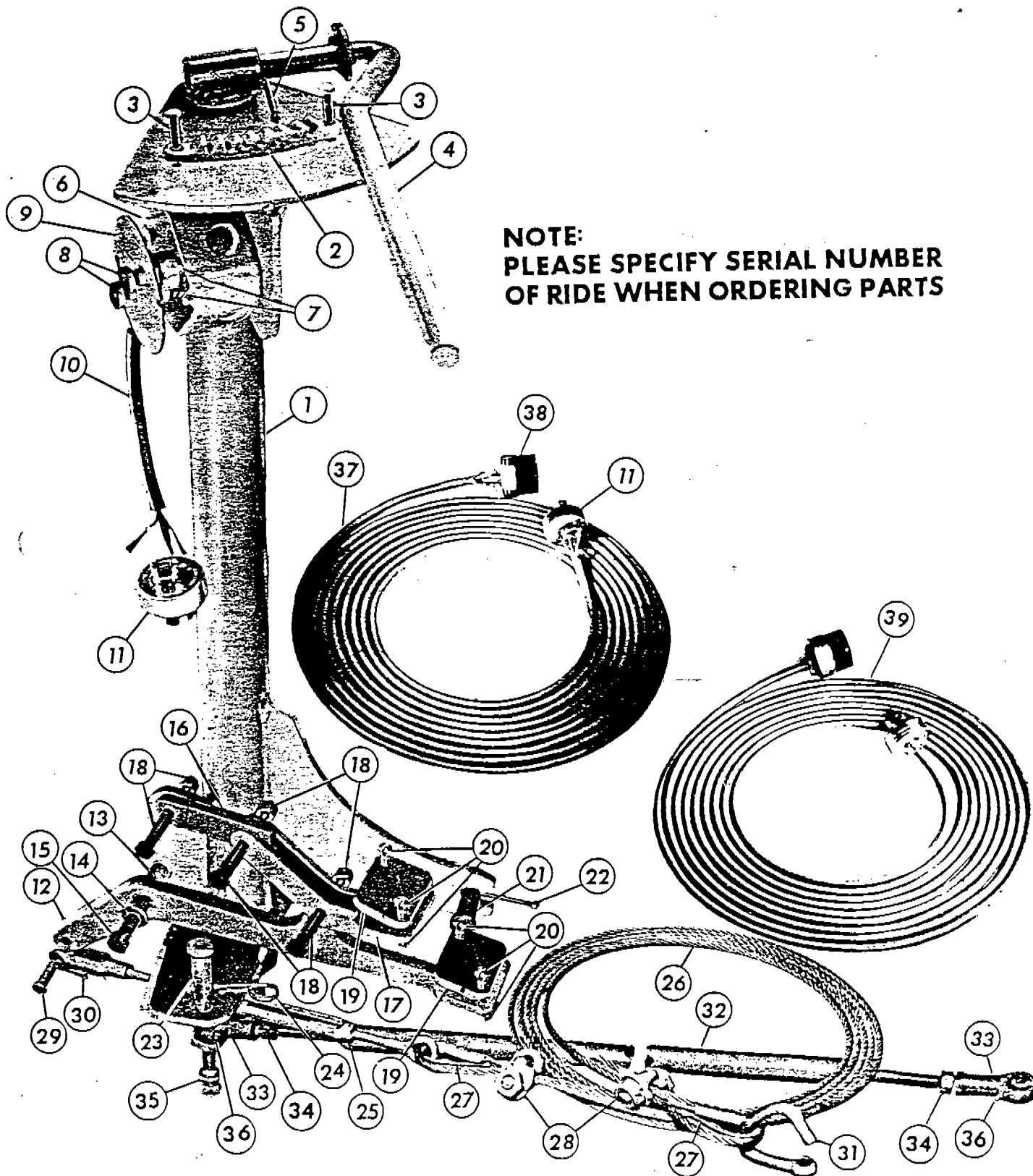
\* Not Illustrated.

REF. NO.	PART NO.	NAME OF PART	INO. REQ.
12	PR-675	MUD SILL BRACE ROD END	2
13	PR-675A	MUD SILL BRACE ROD END BOLT ASSEMBLY	2
14	O-275A	ZERK FITTING	2
15	PR-710	MUD SILL BRACE ROD PIN	2
16	PR-646	WEDGE ASSEMBLY	2
17	PR-675B	MUD SILL BRACE ROD END LOCK NUT	2
18	PR-711	REFLECTOR	2
19	PR-711A	REFLECTOR MACHINE SCREW ASSEMBLY	4
*	PR-7	OUTER MUD SILL (L. H.)	1
*	PR-138A	INNER MUD SILL (L. H.)	1
*	PR-146A	MUD SILL GATE (L. H.)	1





# CONTROL STAND ASSEMBLY



**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS





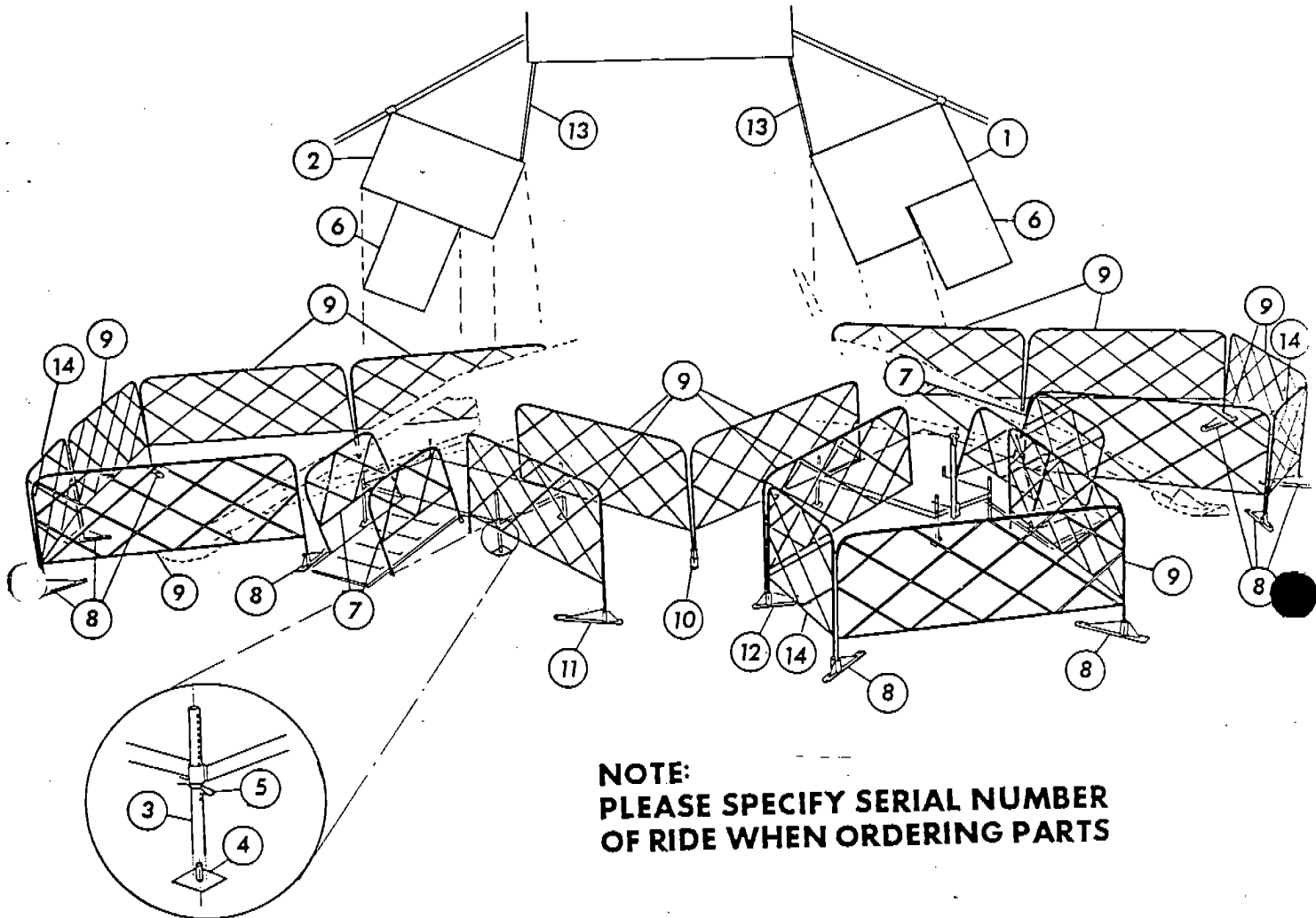
## CONTROL STAND ASSEMBLY

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-633	CONTROL STAND	1	21	L-378	CONTROL STAND MOUNTING PIN	1
2	RR-117	RATCHET SEGMENT	1	22	PR-633B	CONTROL STAND MOUNTING PIN COTTER KEY	1
3	RR-117A	RATCHET SEGMENT BOLT ASSEMBLY	2	23	W-83	TAPER PIN (3/4")	2
4	O-192	CONTROL STAND HANDLE	1	24	W-83A	TAPER PIN SAFETY KEY	2
5	O-192A	CONTROL STAND HANDLE COTTER KEY	1	25	PR-787	BRAKE CABLE TURN BUCKLE	1
6	E-185	OUTLET BOX	1	26	PR-715	BRAKE CABLE (3/16" X 130")	1
7	E-30	START & STOP SWITCH	2	27	RR-187B	CABLE THIMBLE (3/16")	2
8	E-30A	START & STOP SWITCH MOUNTING NUT	2	28	RR-185A	BRAKE CABLE CLAMP (3/16")	2
9	E-186	OUTLET BOX COVER	1	29	PR-411B	CLEVIS PIN	1
10	E-39	MOTOR CORD LEAD	1	30	PR-411C	CLEVIS PIN COTTER KEY	1
11	E-40	MALE PLUG	2	31	PR-715C	COLD SHUT (1/4")	1
12	PR-257	FOOT BRAKE LEVER	1	32	PR-522	CONTROL ROD	1
13	PR-650	BUSHING	1	33	O-551	CONTROL ROD END	2
14	PR-257A	FOOT BRAKE LEVER WASHER	2	34	O-551A	CONTROL ROD END LOCK NUT	2
15	PR-257B	FOOT BRAKE LEVER BOLT ASSEMBLY	1	35	PR-633A	CONTROL ROD END BOLT ASSEMBLY	2
16	PR-259	TRIP BRAKE LOCK	1	36	O-275A	ZERK FITTING	2
17	PR-258	FOOT BRAKE RELEASE LEVER	1	37	E-194	MOTOR CORD	1
18	PR-258A	FOOT BRAKE RELEASE LEVER BOLT ASSEMBLY	3	38	E-41	FEMALE PLUG	1
19	PR-257D	FOOT BRAKE LEVER PAD	2	39	E-194A	MOTOR CORD ASSEMBLY	1
20	PR-257C	BRAKE LEVER PAD SCREW ASSEMBLY	4	*	E-33	CORD CONNECTOR (1/2") (#6623)	1

\* Not Illustrated.



# LOADING PLATFORM & FENCE ASSEMBLY



**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

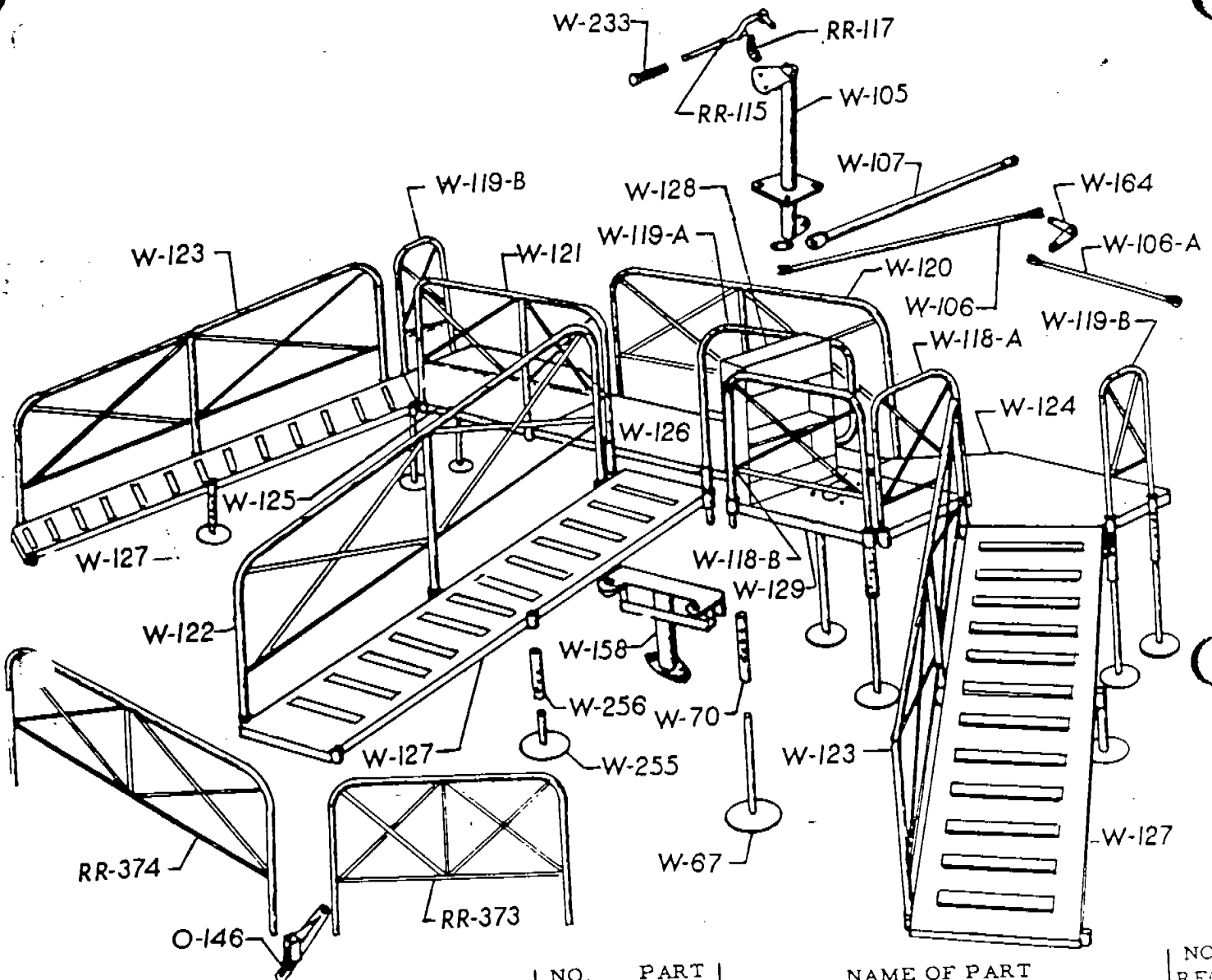
REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-298	LOADING PLATFORM (R. H.)	1
2	PR-297	LOADING PLATFORM (L. H.)	1
3	PR-398	LOADING PLATFORM JACK TUBE	10
4	PR-397	LOADING PLATFORM JACK BASE	8
5	W-97A	LOADING PLATFORM JACK PIN	10
6	PR-174	LOADING RAMP	2
7	PR-473	LOADING RAMP FENCE	4

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
8	O-146	FENCE JACK	18
9	O-542	FENCE SECTION (Long)	15
10	PR-794	INNER FENCE JACK	1
11	PR-793	OUTER FENCE JACK (L. H.)	1
12	PR-792	OUTER FENCE JACK (R. H.)	1
13	PR-642	PLATFORM BRACE	2
14	O-543	FENCE SECTION (Short)	





# LOADING PLATFORM ASSEMBLY



PART NO.	NAME OF PART	NO. REQ.
W-67	LEG, Platform	12
W-70	ADJUSTER, Platform	12
W-105	ASSEMBLY, Control stand	1
W-106	ROD, Brake (long)	1
W-106-A	ROD, Brake (short)	1
W-107	ROD, Tie	1
RR-115	HANDLE, Control	1
RR-117	RATCHET, Control	1
W-118-A	RAIL, Operators platform (short)	1
W-118-B	RAIL, Operators platform (long)	1
W-119-A	RAIL, Loading platform (R. F.)	1
W-119-B	RAIL, Loading platform (end)	2
W-120	RAIL, Loading platform (rear)	1
W-121	RAIL, Loading platform (L. F.)	1
W-122	RAIL, Loading ramp	2

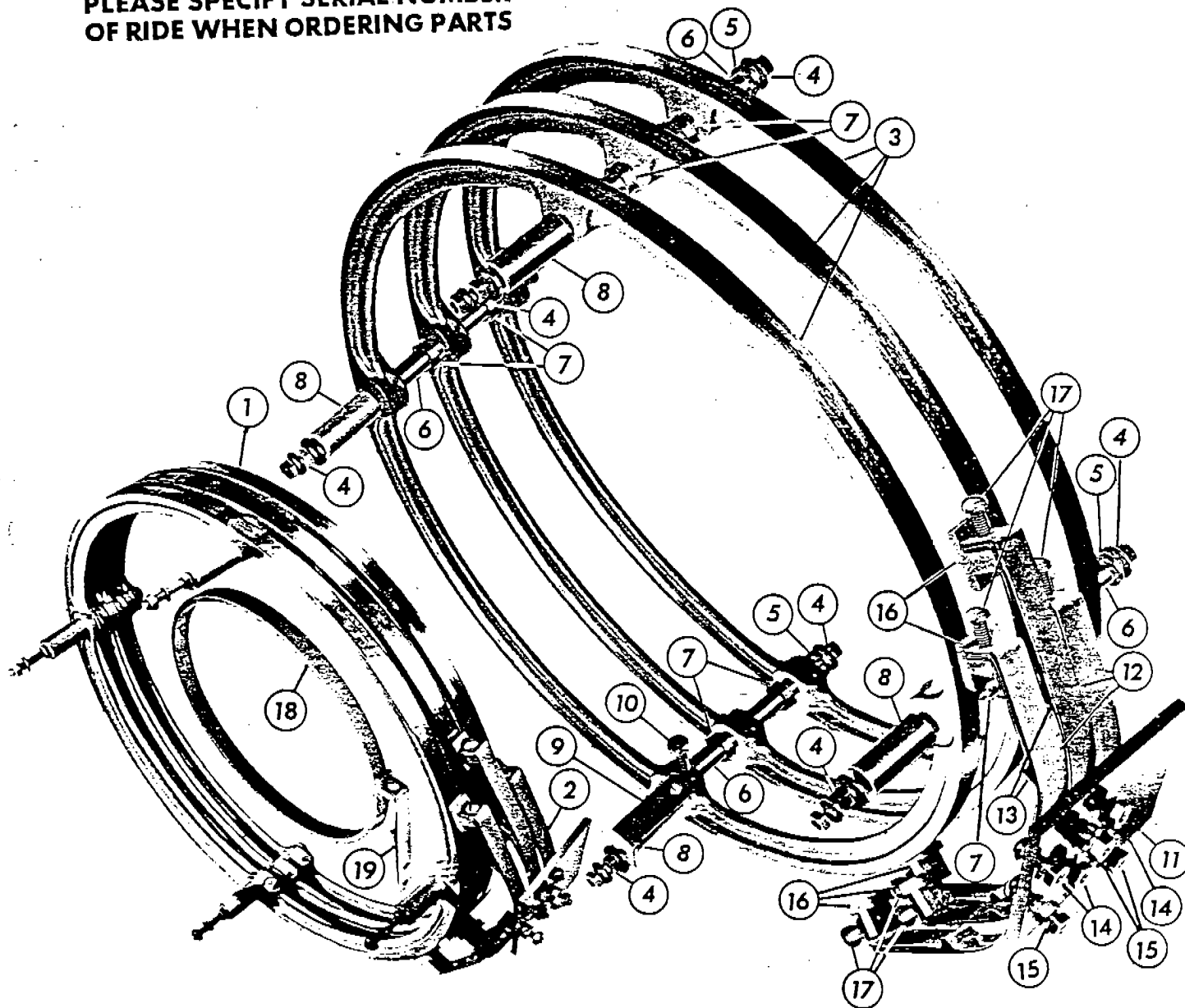
PART NO.	NAME OF PART	NO. REQ.
W-123	RAIL, Exit ramp	4
W-124	PLATFORM, Loading (right)	1
W-125	PLATFORM, Loading (left)	1
W-126	PLATFORM, Loading (center)	1
W-127	RAMP, Loading	3
W-128	BOX, Operator's	1
W-129	STAND, Operator's	1
O-146	JACK, Fence	20
W-158	BRACKET, Platform	1
W-164	CRANK, Bell	1
W-233	GRIP, Rubber hand	1
W-255	FOOT, Ramp	1
W-256	ADJUSTER, Ramp foot	1
RR-373	FENCE (short)	1
RR-374	FENCE (long)	1





## LIGHT RING ASSEMBLY

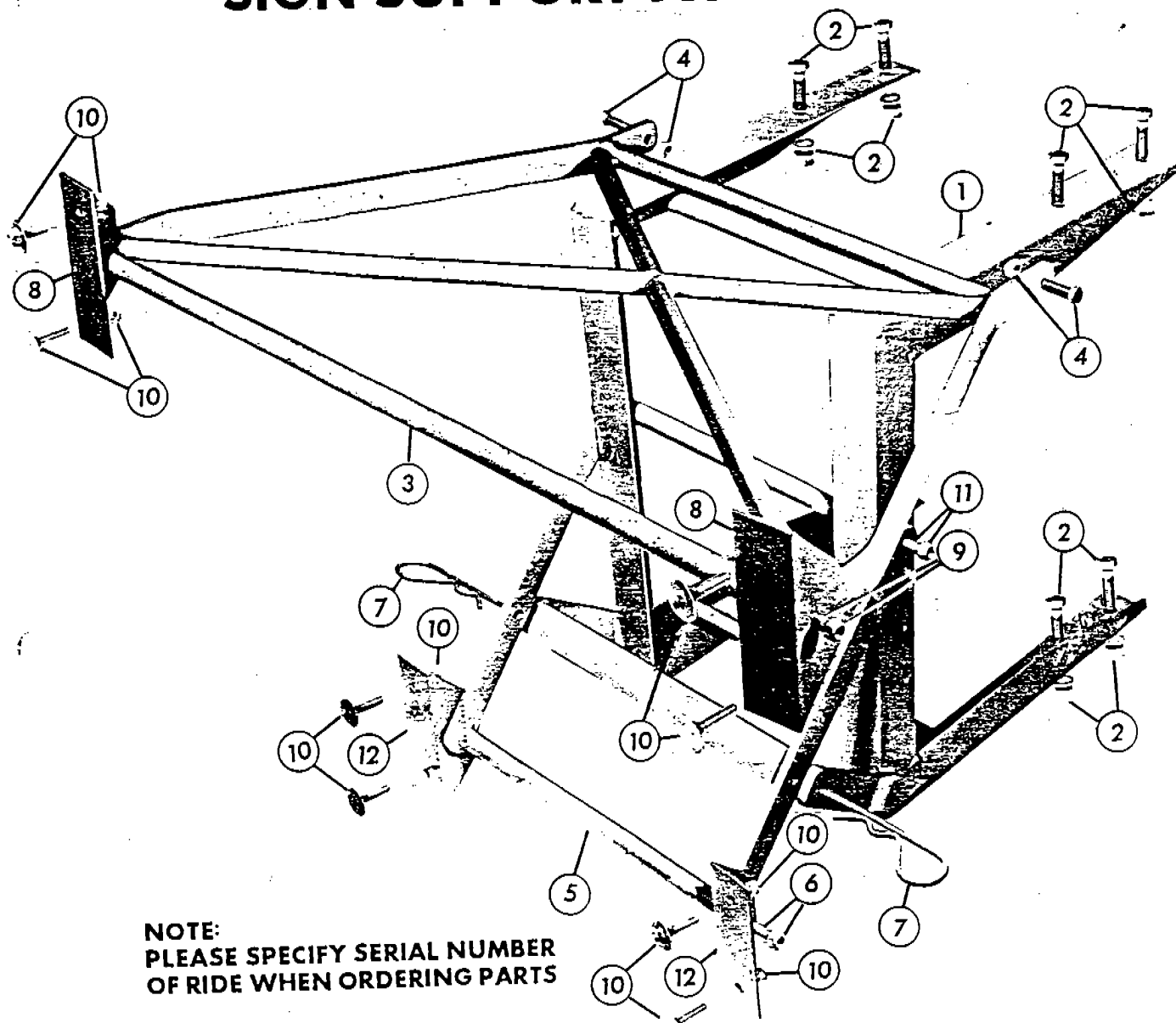
**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS







# SIGN SUPPORT ASSEMBLY

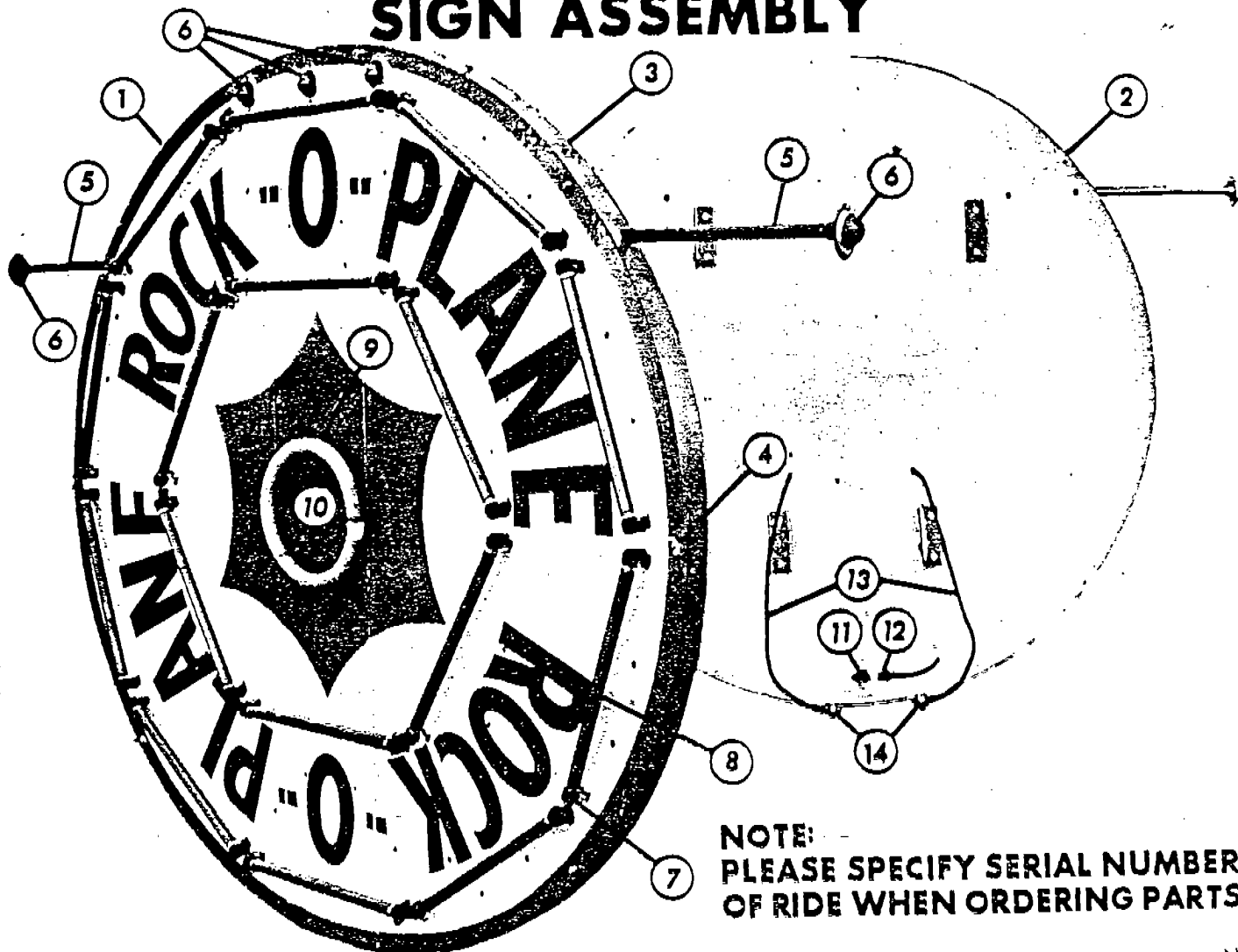


**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

REF. NO.	PART NO.	NAME OF PART	NO. REQ.	REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-341	SIGN BRACKET	1	7	W97A	SAFETY KEY	2
2	PR-341A	SIGN BRACKET BOLT ASSEMBLY	8	8	PR-340C	SIGN HINGE ANGLE (Upper)	2
3	PR-338	SIGN HINGE	1	9	PR-748	SIGN HINGE ROD ASSEMBLY	1
4	PR-338A	SIGN HINGE BOLT ASSEMBLY	2	10	PR-340A	SIGN HINGE ANGLE BOLT ASSEMBLY	8
5	PR-342	SIGN HINGE (Front)	1	11	PR-779	SIGN HINGE ROD ASSEMBLY (Middle)	1
6	PR-749	SIGN HINGE ROD ASSEMBLY (Lower)	1	12	PR-340B	SIGN HINGE ANGLE (Lower)	2



## SIGN ASSEMBLY



**NOTE:**  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	PR-741	SIGN FACE PANEL ASSEMBLY	1
2	PR-742	SIGN BACK PANEL	1
3	PR-743	SIGN BAND	1
4	PR-744	FACE PANEL BOLT ASSEMBLY	6
5	PR-437	CLEARANCE LIGHT ARM	2
6	E-132	CLEARANCE & MARKER LIGHTS	5
7	E-4	FLUORESCENT LAMP HOLDER	32
8	E-153	FLUORESCENT LAMP (Specify Color)	16
9	E-148	CIRCLINE LAMP	1

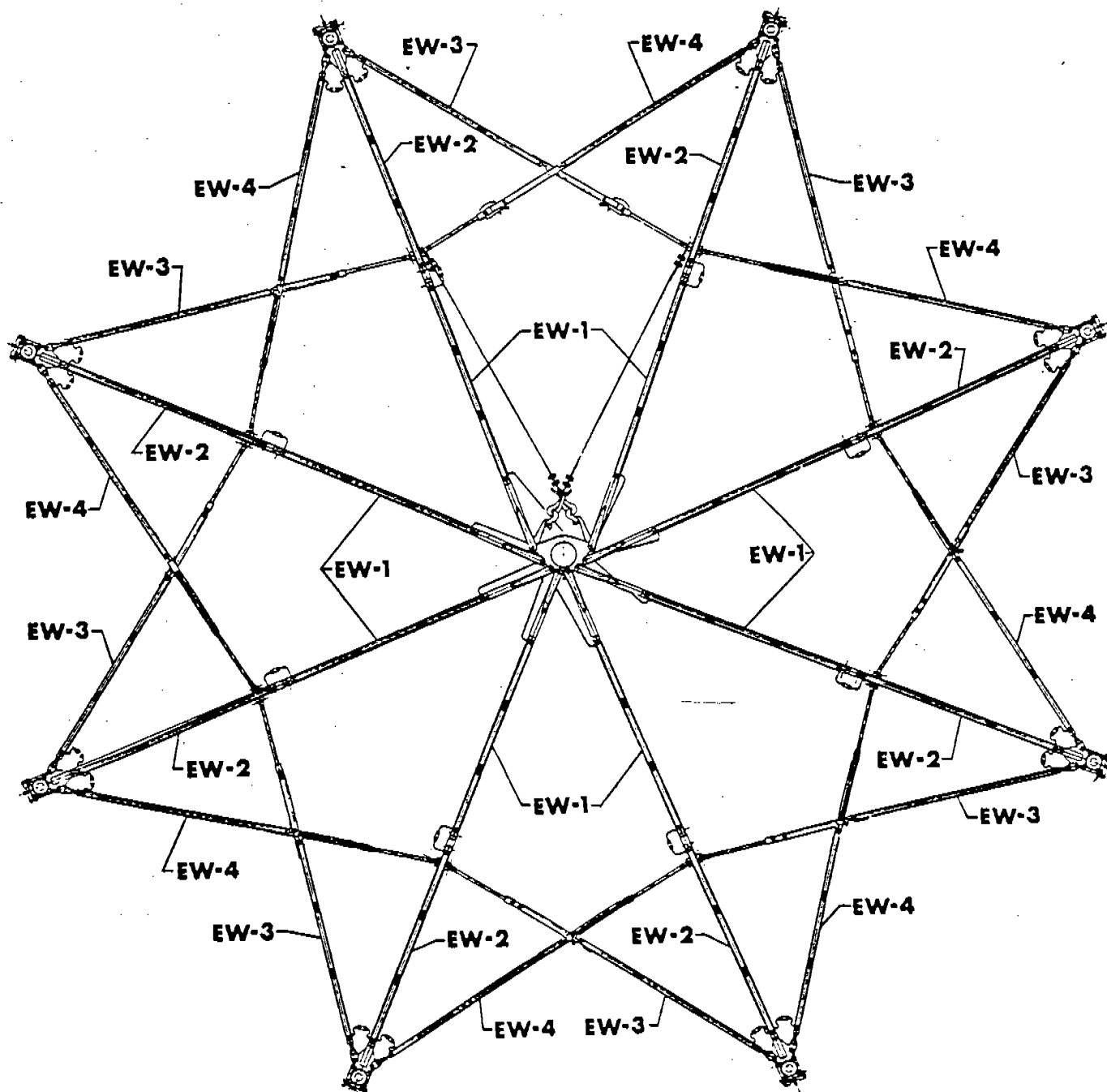
REF. NO.	PART NO.	NAME OF PART	NO. REQ.
10	E-149	CIRCLINE LAMP CLIP	6
11	E-196	MARKER LIGHT PLUG (Male)	1
12	E-197	MARKER LIGHT PLUG (Female)	1
13	E-195	FLUORESCENT LIGHT CORD	2
14	E-3	FLUORESCENT LIGHT PLUG (Male)	2
*	PR-437A	CLEARANCE LIGHT ARM BOLT ASSY.	4
*	E-11	BALLAST	16
*	E-147B	CIRCLINE BALLAST	1
*	PR-334	SIGN ASSEMBLY	1

\* Not Illustrated.





## FLUORESCENT FIXTURES



**DETERMINE THE PART NUMBER OF THE LIGHT  
FIXTURE REQUIRED BY ITS POSITION ON RIDE**

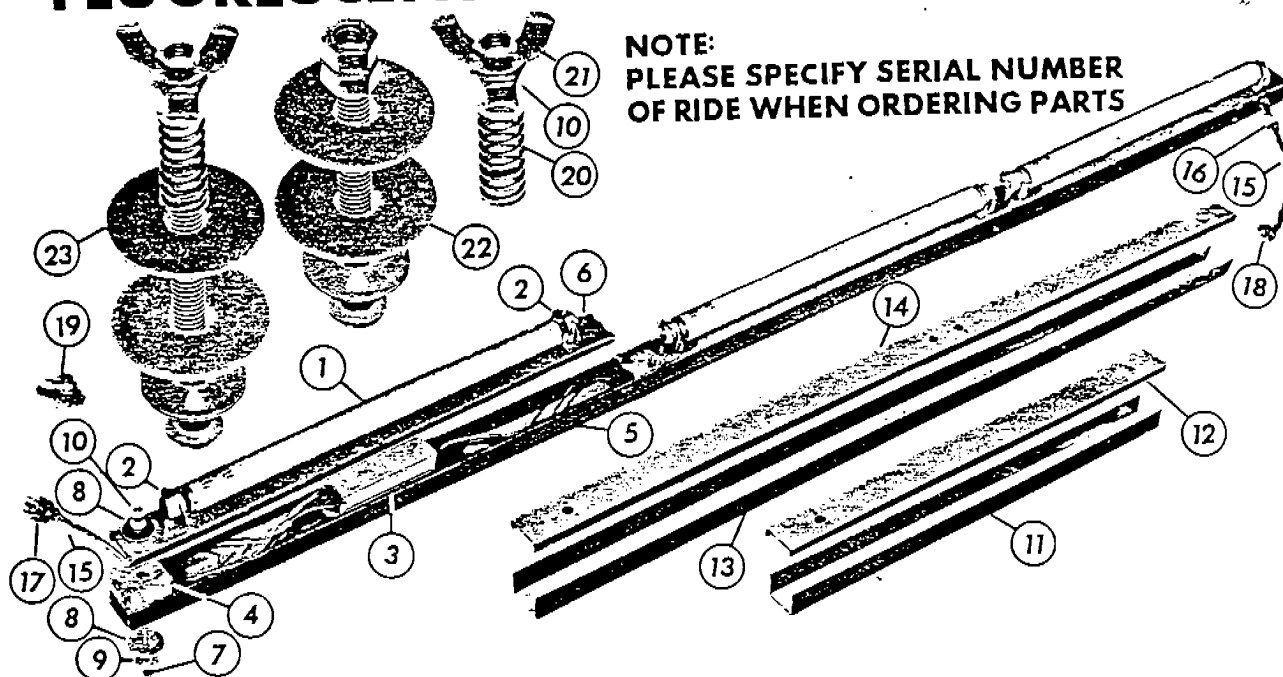
**REFER TO NEXT PAGE FOR PART NUMBERS  
WHEN ORDERING COMPONENT PARTS**

**NOTE:  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS**





# FLUORESCENT FIXTURE COMPONENTS



NOTE:  
PLEASE SPECIFY SERIAL NUMBER  
OF RIDE WHEN ORDERING PARTS

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
1	E-1G	FLUORESCENT LAMP (Green)	-
1	E-1GO	FLUORESCENT LAMP (Gold)	-
1	E-1R	FLUORESCENT LAMP (Red)	-
2	E-4	FLUORESCENT LAMP HOLDER	6
3	E-11	BALLAST	3
4	E-10	BLOCK (Box End)	2
5	E-15	BOX (Three Lamp Fixture)	1
6	E-8	BOX COVER (Three Lamp Fixture)	1
7	E-14	MOUNTING BOLT	2
8	E-12	WASHER (Flat)	4
9	E-13	WASHER (Curved)	2
10	E-6	MOUNTING NUT (Standard Ride)	2
11	E-22	BOX (Two Lamp Fixture)	
12	E-21	BOX COVER (Two Lamp Fixture)	
13	E-16	Box (One Lamp Fixture)	
14	E-19	BOX COVER (One Lamp Fixture)	
15	E-2	FLUORESCENT FIXTURE CORD (9")	
15	E-2A	FLUORESCENT FIXTURE CORD (15")	
15	E-2B	FLUORESCENT FIXTURE CORD (18")	
15	E-2C	FLUORESCENT FIXTURE CORD (22")	

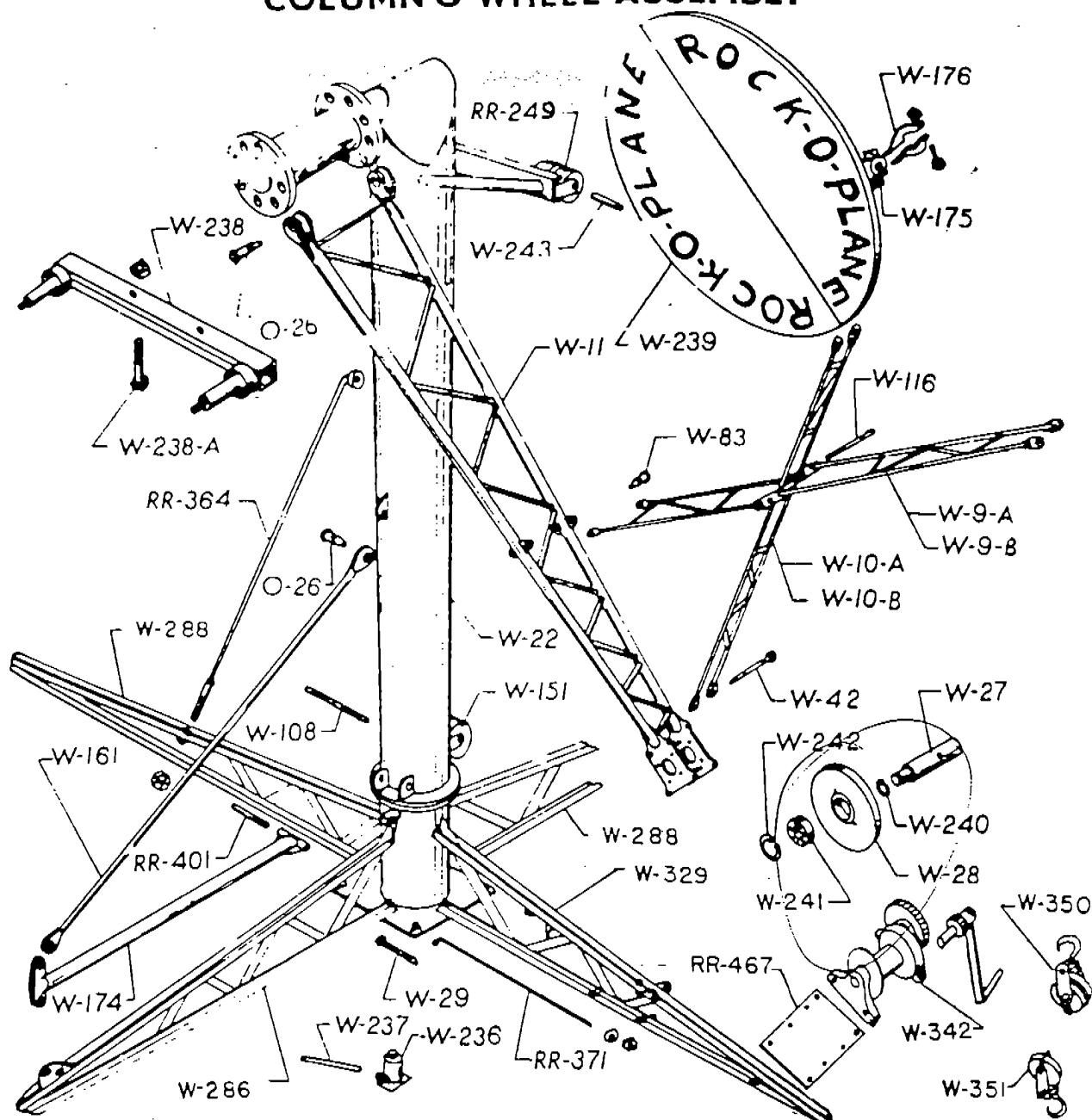
NOTE: The "No. Req." Column Indicates the Number of Each Part Required for a Three Lamp Fixture.

REF. NO.	PART NO.	NAME OF PART	NO. REQ.
15	E-2D	FLUORESCENT FIXTURE CORD (24")	
15	E-2E	FLUORESCENT FIXTURE CORD (26")	
15	E-2F	FLUORESCENT FIXTURE CORD (28")	
15	E-2G	FLUORESCENT FIXTURE CORD (32")	
15	E-2H	FLUORESCENT FIXTURE CORD (36")	
15	E-2J	FLUORESCENT FIXTURE CORD (40")	
15	E-2K	FLUORESCENT FIXTURE CORD (48")	
15	E-2L	FLUORESCENT FIXTURE CORD (53")	
15	E-2M	FLUORESCENT FIXTURE CORD (63")	
16	E-9	CORD GRIP	2
17	E-20	MALE CAP (Midget)	1
18	E-17	CONNECTOR BODY (Midget)	1
19	E-3	MALE CAP	1
20	E-7	SPRING (Mounting) (Standard Ride)	2
21	E-5	WING NUT (Mounting Bolt) (Standard Ride)	2
22	E-14B	MOUNTING BOLT ASSY. (Permanent Ride)	
23	E-14A	MOUNTING BOLT ASSY. (Standard Ride)	
*	E-11A	MACHINE SCREW ASSEMBLY	
*	E-8A	SHEET METAL SCREW (Box Cover)	

\*Not Illustrated, - Specify Number Required.



# COLUMN & WHEEL ASSEMBLY



PART NO.	NAME OF PART	NO. REQ.
W-9-A	BRACE, Outer cross	2
W-9-B	BRACE, Outer cross (adj. stand)	1
W-10-A	BRACE, Inner cross	2
W-10-B	BRACE, Inner cross (adjustable)	1
W-11	SWEEP, Wheel	1
W-22	ASSEMBLY, Column	1
O-26	PIN, Universal taper	24
W-27	SHAFT, Idler	1
W-28	SHEAVE, Idler	1
W-29	PIN, Mud sill (long)	2
W-32	PIN, Sweep (small)	1
W-41	PIN, Taper (small)	1
W-108	PIN, Column (long)	1
W-286	MUD SILL, Front	1
W-329	MUD SILL, Rear (long)	1
W-116	PIN, Cross brace (long)	1
W-151	ROLLER, Column	1
W-171	ROD, Sign (long)	1
W-350	HOISTING BLOCK, DOUBLE	1
W-351	HOISTING BLOCK, SINGLE	1

PART NO.	NAME OF PART	NO. REQ.
W-171	POLE, Sign	1
W-175	BRACKET, Sign	4
W-17	CLAMP, Sign	4
W-249	JACK, Column	1
W-247	HANDLE, Column jack	1
W-248	BRACKET, Car hauling	4
W-238-A	BOLT & NUT, Bracket	8
W-239	SIGN, Wheel	1
W-240	RING, Idler shaft lock	1
W-241	BEARING, Idler sheave	2
W-242	RING, Idler sheave lock	2
W-243	AXLE, Column Dolly (small)	2
RR-249	ROLLER, Column carriage	4
W-288	MUD SILLS, Left hand & rear	2
RR-364	ROD, Sweep brace	3
RR-371	ROD, Sign	8
RR-401	PIN, Sign	1
RR-467	WINCH PLATE	1
W-342	WINCH	1



**WHEEL HUB ASSEMBLY**

Diagram illustrating the components of a Wheel Hub Assembly, including:

- W-85
- W-84
- W-278
- W-8
- W-8-A
- W-7
- W-86
- W-278-A
- W-87
- W-51
- W-88

NO. PART

NAME OF PART

PART NO.	NAME OF PART	NO. REQ.	PART NO.	NAME OF PART	NO. REQ.
W-7	HUB, Wheel	1	W-85	WASHER, Wheel spindle lock	1
W-8	CAP, Wheel hub	1	W-86	BEARING, Wheel outer	1
W-8-A	CAP BOLT, NUT & LOCK WASHER, Wheel hub	8	W-87	BEARING, Wheel inner	1
W-51	RING, Hub seal	1	W-88	SEAL, Wheel grease	1
W-84	NUT, Wheel spindle	1	W-278	SAFETY PLATE	2
			W-278-A	SAFETY PLATE CAP SCREW	

**CAR SUPPORT ASSEMBLY**

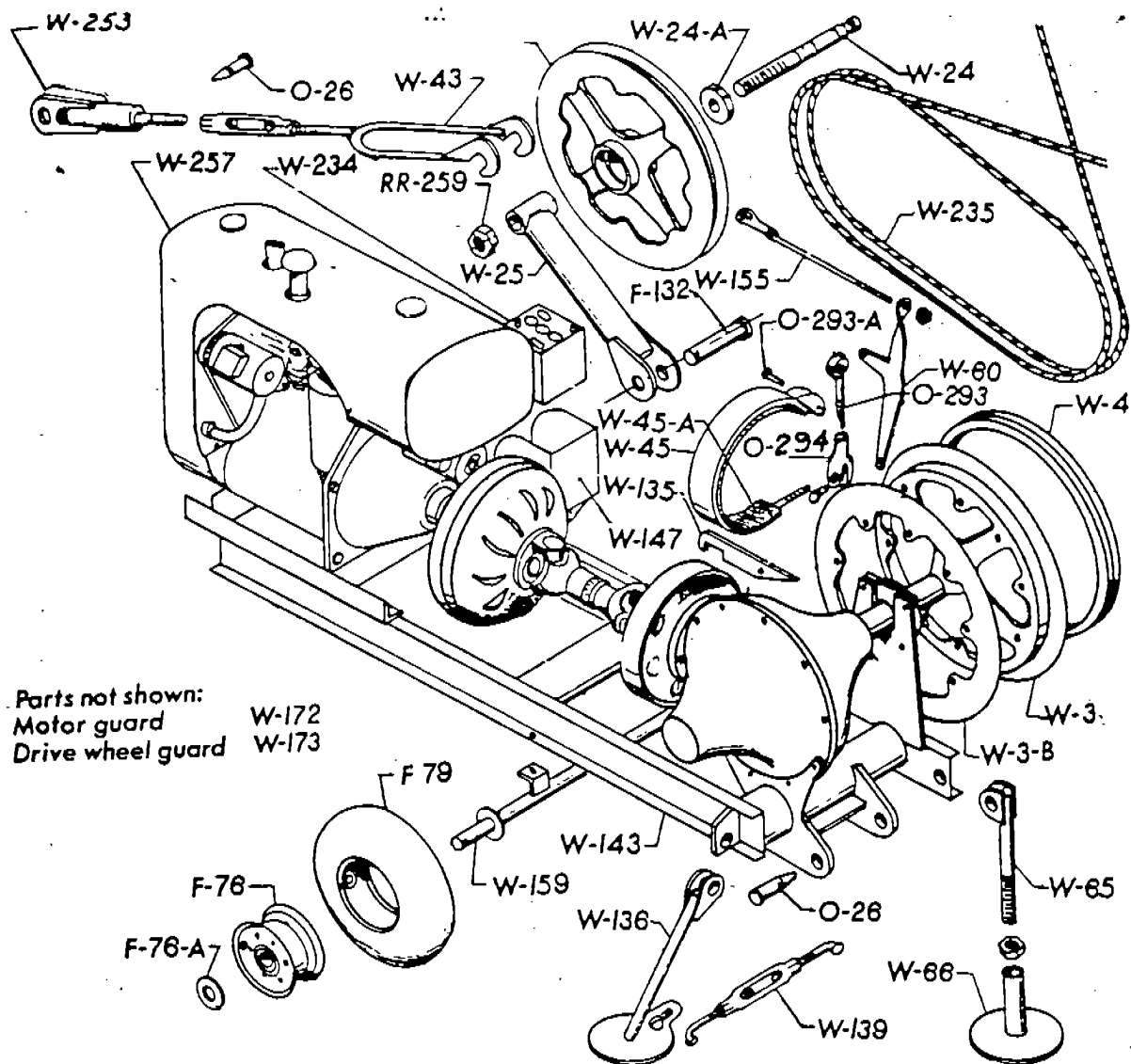
W-79-A  
W-79-B  
W-80  
W-81  
W-82  
W-44  
W-79  
W-101  
W-55  
W-14-B  
W-5  
W-14-A  
W-83

NO. PART	REQ. NO.	NAME OF PART
1	1	W-79-A
1	1	W-79-B
1	1	W-80
1	1	W-81
1	1	W-82
1	1	W-44
1	1	W-79
1	1	W-101
1	1	W-55
1	1	W-14-B
1	1	W-5
1	1	W-14-A
1	1	W-83

PART NO.	NAME OF PART	NO. REQ.	PART NO.	NAME OF PART	NO. REQ.
W-5	LINER, Shoe	8	W-79-A	BOLT, NUT & L. W., Car spindle bearing (long)	32
W-14-A	SHOE, Cable (left)	8	W-79-B	BOLT, NUT & L. W., Car spindle bearing (short)	32
W-14-B	SHOE, Cable (right)	8	W-80	NUT, Car spindle	8
W-44	DRUM, Car brake	8	W-81	WASHER, Car spindle	8
W-55	BOLT, NUT, L. W., Cable shoe	16	W-82	NUT, Car spindle lock	8
W-101	SPINDLE, Car	8	W-83	PIN, Cable block	8
W-79	BEARING, Car spindle	16			



# POWER UNIT ASSEMBLY



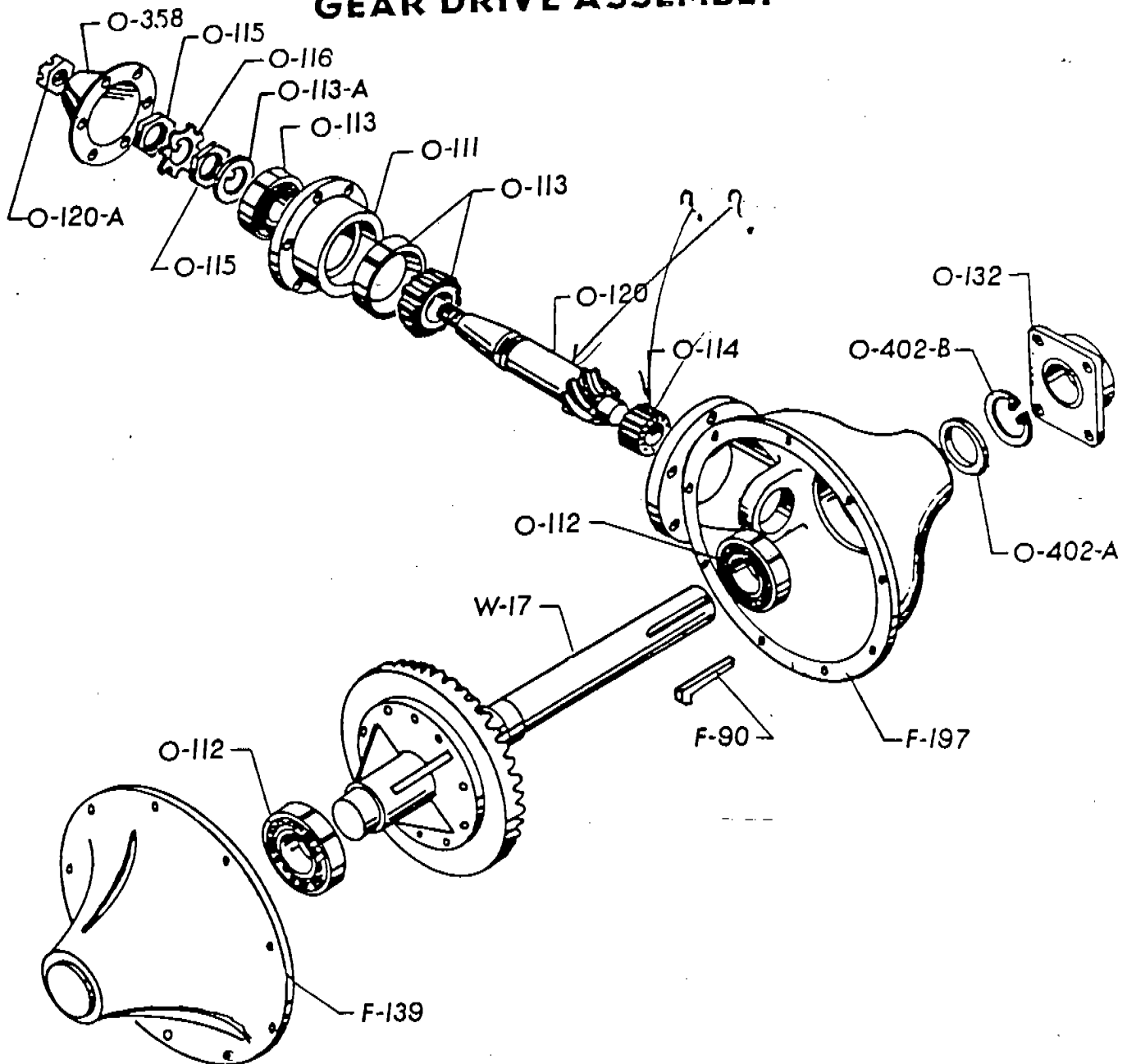
Parts not shown:  
Motor guard W-172  
Drive wheel guard W-173

PART NO.	NAME OF PART	NO. REQ.	PART NO.	NAME OF PART	NO. REQ.
W-3	WHEEL, Cable drive	1	W-135	GUIDE, Motor brake band	1
W-3-B	RING, Cable drive wheel	1	W-136	LEG, Motor outrigger	1
W-4	BAND, Drive wheel	1	W-139	TURNBUCKLE, Motor leg	4
W-24	SPINDLE, Cable tightener	1	W-143	FRAME, Drive unit	1
W-24-A	BEARING, Cable tightener	2	W-147	BOX, Battery	1
W-25	ARM, Cable tightener	1	W-155	ROD, Throttle	1
O-26	PIN, Universal taper	7	W-159	AXLE, Motor frame (rear)	2
W-43	YOKE, Cable tightener	1	W-233	CABLE TENSION UNIT	1
W-45	BAND, Brake	1	W-234	BATTERY, Storage	1
W-45-A	LINING, Brake	1	W-235	CABLE, Drive	1
W-60	LEVER, Brake	1	W-257	ENGINE, Gasoline	1
W-65	LEG, Motor	3	RR-259	NUT, Cable tightener spindle	2
W-66	FOOT, Motor	4	W-273	WHEEL, Cable tightener	1
F-76	WHEEL	4	O-293	ROD, Brake	1
F-76-A	WASHER, Wheel retainer	4	O-293-A	PIN, Brake rod	1
F-79	TIRE & TUBE	1	O-294	CLEVIS, Brake rod	1
F-132	PIN, Thimble	1			





## GEAR DRIVE ASSEMBLY



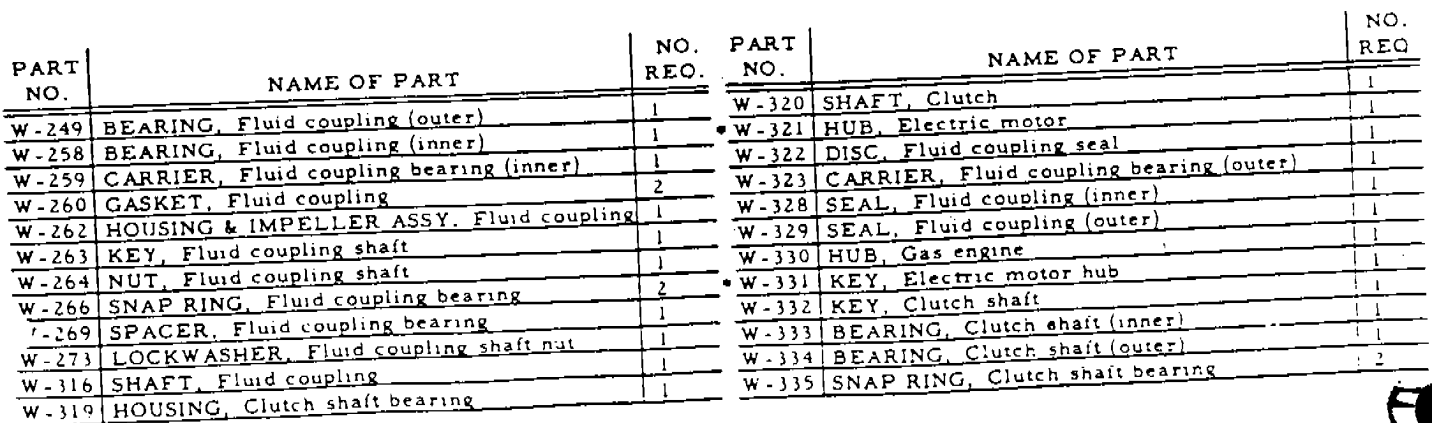
PART NO.	NAME OF PART	NO. REQ.
W-17	AXLE, Gear drive	1
F-90	KEY, Axle	2
O-111	ASSEMBLY, Pinion sleeve	1
O-112	BEARING, Drive shaft	2
O-113	BEARING, Pinion	2
O-113-A	WASHER, Pinion bearing	1
O-114	BEARING, Pinion pilot	1
O-115	NUT, Pinion bearing	2
O-116	LOCK WASH. Pinion bearing nut	1

PART NO.	NAME OF PART	NO. REQ.
O-120	PINION	1
O-120-A	NUT, Pinion	1
O-132	BEARING, Drive shaft	1
F-139	HOUSING, Upper	1
F-197	HOUSING, Lower	1
O-358	PLATE, Pinion cover	1
O-402-A	SEAL, Housing bell grease	1
O-402-B	RING, Housing bell lock	1



\* not illustrated





\*Used with electric power only.



# ELECTRICAL PARTS ASSEMBLY

This diagram illustrates the electrical components and their assembly for a vehicle. The central vertical structure is the main chassis or frame. Key components include:

- Motor Control System (Top Right):** Includes the electric motor (W-223), control box (W-222), and various wiring (W-214, W-216, W-215, W-218, W-213, W-221, W-217, W-212).
- Engine Control System (Bottom Right):** Includes the engine control box (W-212), various wiring (W-220, W-225, W-226, W-227, W-228, W-229, W-230, W-231, W-232), and a connection to the engine (TO ENGINE).
- Lighting and Signal Components:** Includes the main headlight assembly (W-198, W-200, W-199, W-201, W-206, W-202, W-203, W-205, W-204, W-210, W-211, W-219, W-224), side lights (W-188, W-189, W-190, W-187, W-186, W-179, W-197, W-195, W-196), and a horn (W-180, O-486).
- Structural and Mounting Components:** Includes various brackets (W-180, W-188, W-189, W-190, W-187, W-186, W-179, W-197, W-195, W-196), bolts (W-198, W-200, W-199, W-201, W-206, W-202, W-203, W-205, W-204, W-210, W-211, W-219, W-224, W-225, W-226, W-227, W-228, W-229, W-230, W-231, W-232), and a battery (W-290).

The diagram is a detailed exploded view showing the spatial relationship between these parts for assembly.

PART NO.	NAME OF PART	NO. REQ.	PART NO.	NAME OF PART	NO. REQ.
O-38	LIGHT RING (Half)	6	W-206	PAD BOLT & NUT	6
W-105	CONTROL STAND	1	W-289	LIGHT BOX	32
W-179	RECEPTACLE	10	W-290	LIGHT BOX COVER	32
W-180	RECEPTACLE CAP	34	W-209	COLUMN RECEPTACLE	1
O-406	BOX END (Fluorescent Fixture)	64	W-210	COLUMN RECEPTACLE CAP	1
MB-78	FLUORESCENT TUBE	96	W-211	LEAD (Column to Switch)	1
MB-79	FLUORESCENT TUBE SOCKET	192	W-212	MAIN SWITCH	1
MB-82	FLUORESCENT BALLAST	96	W-213	MAGNETIC SWITCH	1
W-186	BOLT, Stringer	64	W-214	BRAKE LEVER SWITCH	1
W-187	BEVEL WASHER	64	W-215	SELECTOR SWITCH	1
W-188	FLAT WASHER	64	W-216	LEAD (Control Stand (Electric Power)	1
W-189	SPRING	64	W-217	LEAD (Control Stand to Magnetic Switch)	1
W-190	NUT	64	W-218	LEAD (Brake Lever Switch to Magnetic Switch)	1
W-356	SIGN LIGHT	1	W-219	LEAD (Control Stand (Gas Power)	1
W-357	SIGN LIGHT TUBE	1	W-220	LEAD (Control Stand to Engine)	1
W-358	CONNECTOR BODY	24	W-221	LEAD (Main Switch to Magnetic Switch)	1
W-194	LIGHT STRINGER (Inner)	8	W-222	LEAD (Magnetic Switch to Motor)	1
W-195	LIGHT STRINGER (Outer)	8	W-223	ELECTRIC MOTOR	1
W-196	LIGHT STRINGER (Side)	16	W-224	LEAD (Column)	1
W-197	CLUSTER COVER	2	W-225	CONTROL STAND RECEPTACLE BOX	1
W-198	BOLT, Light Ring Bracket	8	W-226	CONTROL STAND RECEPTACLE	1
W-199	LIGHT RING BRACKET	4	W-227	BOX COVER	1
W-200	BOLT, Light Ring	4	W-228	RECEPTACLE CAP	1
W-201	BRUSH ASSEMBLY	1	W-229	START & STOP PUSH BUTTON SWITCH	1
W-202	BRUSH PAD	6	W-230	AMMETER	1
W-203	BRUSH FINGER	3	W-231	UPPER CONTROL STAND BOX	1
W-204	BRUSH INSULATOR BLOCK	1	W-232	UPPER BOX COVER	1
W-205	BRUSH BOLT & NUT	6			









DEPARTMENT OF AGRICULTURE  
WEIGHTS AND MEASURES DIVISION  
106 WEST SECOND STREET  
FRANKFORT, KENTUCKY 40601

November 13, 1991

TO: ALL AMUSEMENT RIDE INSPECTORS  
ALL AMUSEMENT RIDE OWNERS/LESSORS/OPERATORS

SUBJECT: Correct Door-Lap Bar, etc. Safety Key

There has been incidents that possibly involve item or items of equipment as designed by the original manufacturer of listed rides that have not been used or have been used incorrectly and that the possibility of a lack of knowledge has reflected to cause some of the problems.

Eyerly Rides: Fly-O-Plane  
Loop-O-Plane  
Rock-O-Plane  
Roll-O-Plane  
Side Winder

Items of concern by original MFG Part #W-97A Clip, Belt-Bar Safety Key.

Correct Clip (safety key) is of the design of an R-Pin but it is not an R-Pin. This Special Design and its type of steel, it is designed to function as a Safety Key on Lap Bars and Lap Belts on the securing of doors on the above listed rides. See Attachment #1.

The hole in the end of lap belt for part number L-421,-W-97, etc. will not be less than 3/8" from inside of hole to outside of metal for retaining pin in hole.  
Attachment #12

Note on Attachment #2, paragraph U. it states that should the secondary safety pin hole becomes enlarged, weld up with mild steel rod and redrill to fit pin.







Be it is noted on Attachment #3 is illustrated showing a Safety Belt (F-215) without the bar. To the best of our knowledge, Eyerly Manufacture Rides up to 1944 and 1948 the manufacturer had two design carriers for the above listed rides and the buyer had the option on which carrier he desired. As best as known the carriers that were designed with belts usage could not be modified to incorporate their safety belt bar. As to last knowledge as to Mr. Eyerly in 1987 there was at least 50 of these rides still operating.

Note Attachment #5 (item 31), Attachment #9 (item 3), illustrates leather strap that is permanent attached to carrier to hold key while loading and unloading. This strap or similar material must be used to hold safety key. This is to remind operators to install in the lap bar end or belt hole and not to keep in their pocket. Also, if not installed pin will still be attached and not lost and could be seen flying around. Stop ride immediately and install properly. Refer to Attachment #11.

In Attachment #7, item W-97-B and Attachment #12 on item W-97-B and item #34, shows proper way to install safety belt on safety bar.

Attachment #7, item W-131, Attachment #10, item #10 is plunger-door, latch. Attachment #8 item #12 is the other style plunger-door latch.

Inspect - make sure spring W-94, Attachment #7 or Spring #11, Attachment #8, or #10 operate correctly. Insure that plunger end goes in to frame tubing at least to the end of the slanted part/or round part towards the knob W-131-A, Attachment #7, or knob #13 Attachment #8 or #10, Attachment #10.

Sincerely,



Carl Dills, Assistant Director  
Division of Weights and Measures

CD/jg

cc: Attachments







Only This Style Pin Can be used on Eyerly  
Design Type Rides - Regardless of Manufacturer.

Overall Length Not Less Than

6 1/4"

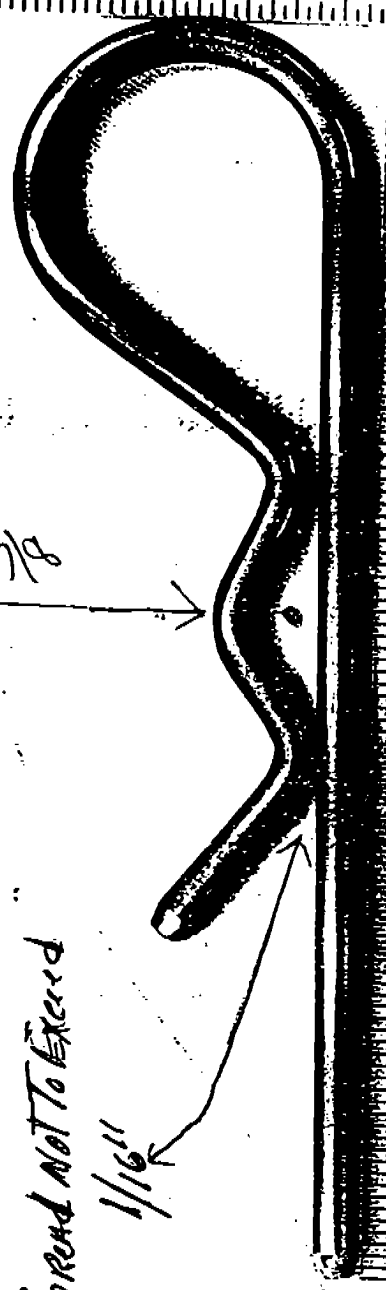
Normal New 6 1/2"

This Opening Approximate

3/8"

Spread Not To Exceed

1/16"



KY DEPT OF AGRICULTURE  
Division of Weights & Measures  
Amusement Ride & Attraction Inspection Sec  
106 W Second St.  
Frankfort, Kentucky 40601

Attachment #



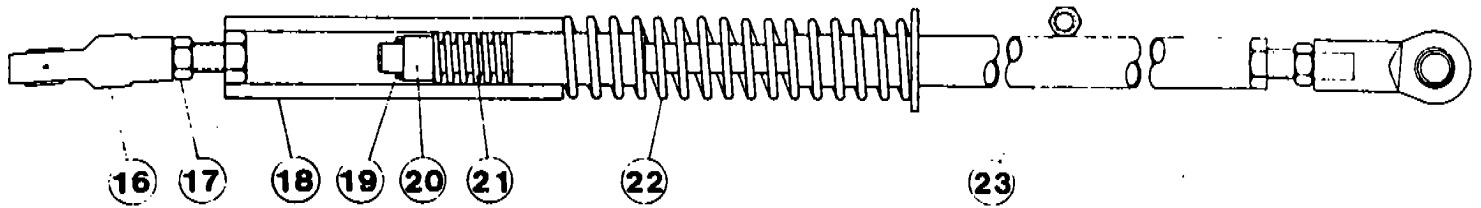




# CAR ASSEMBLY

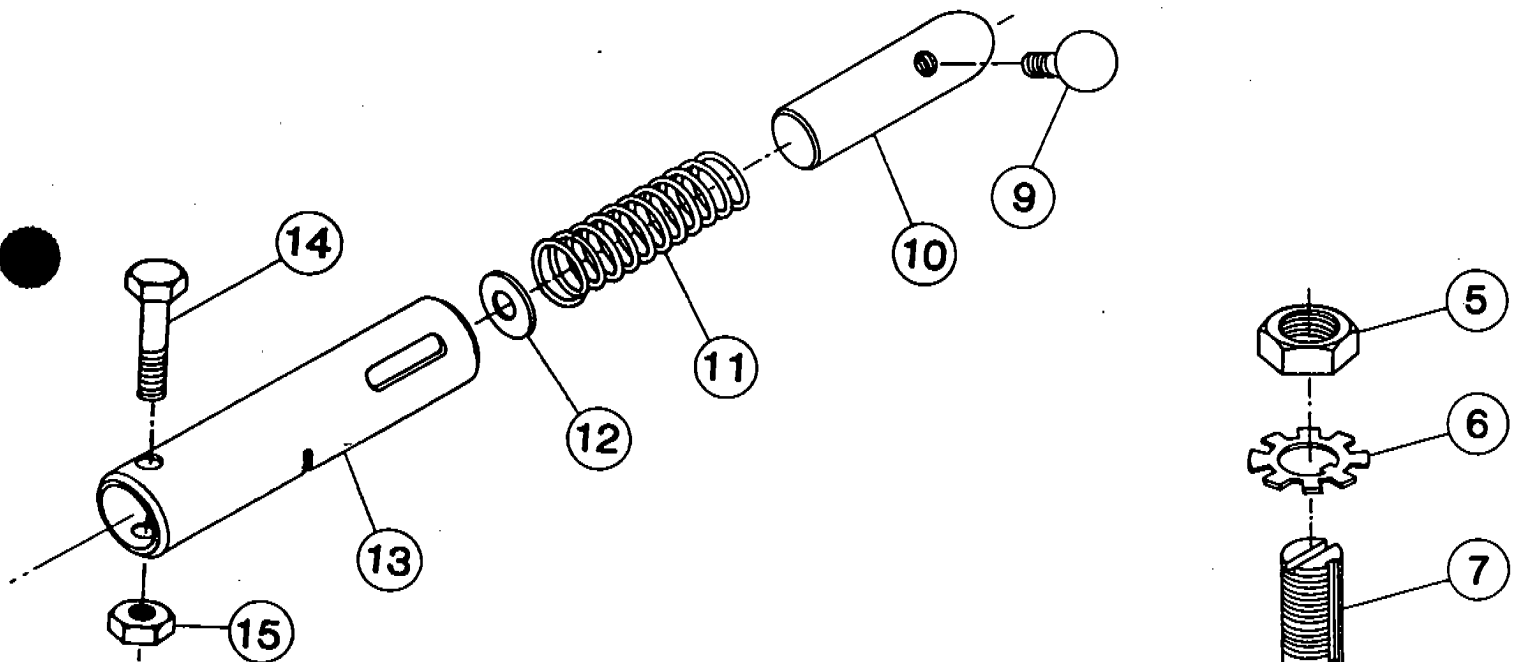
50

*Side Winder*



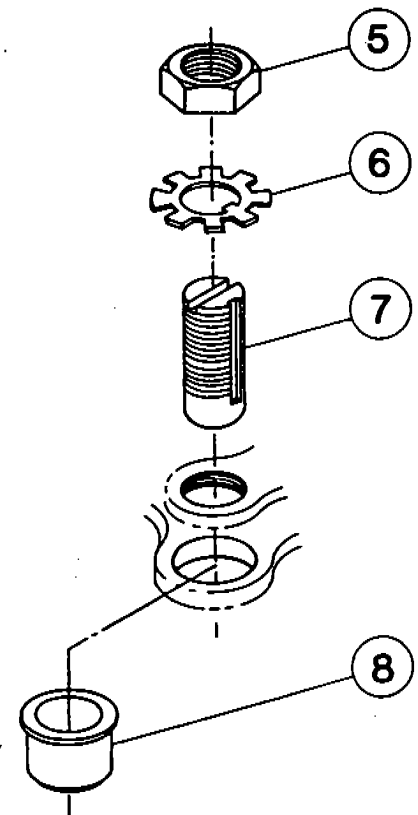
## TIE ROD ASSEMBLY

KY DEPT OF AGRICULTURE  
Division of Weights & Measures  
Amusement Ride & Attraction Inspection Sec.  
106 W Second Street  
Frankfort, Kentucky 40601



## CAR DOOR LATCH ASSEMBLY

## CAR DOOR HINGE ASSEMBLY



*Attachment #10*





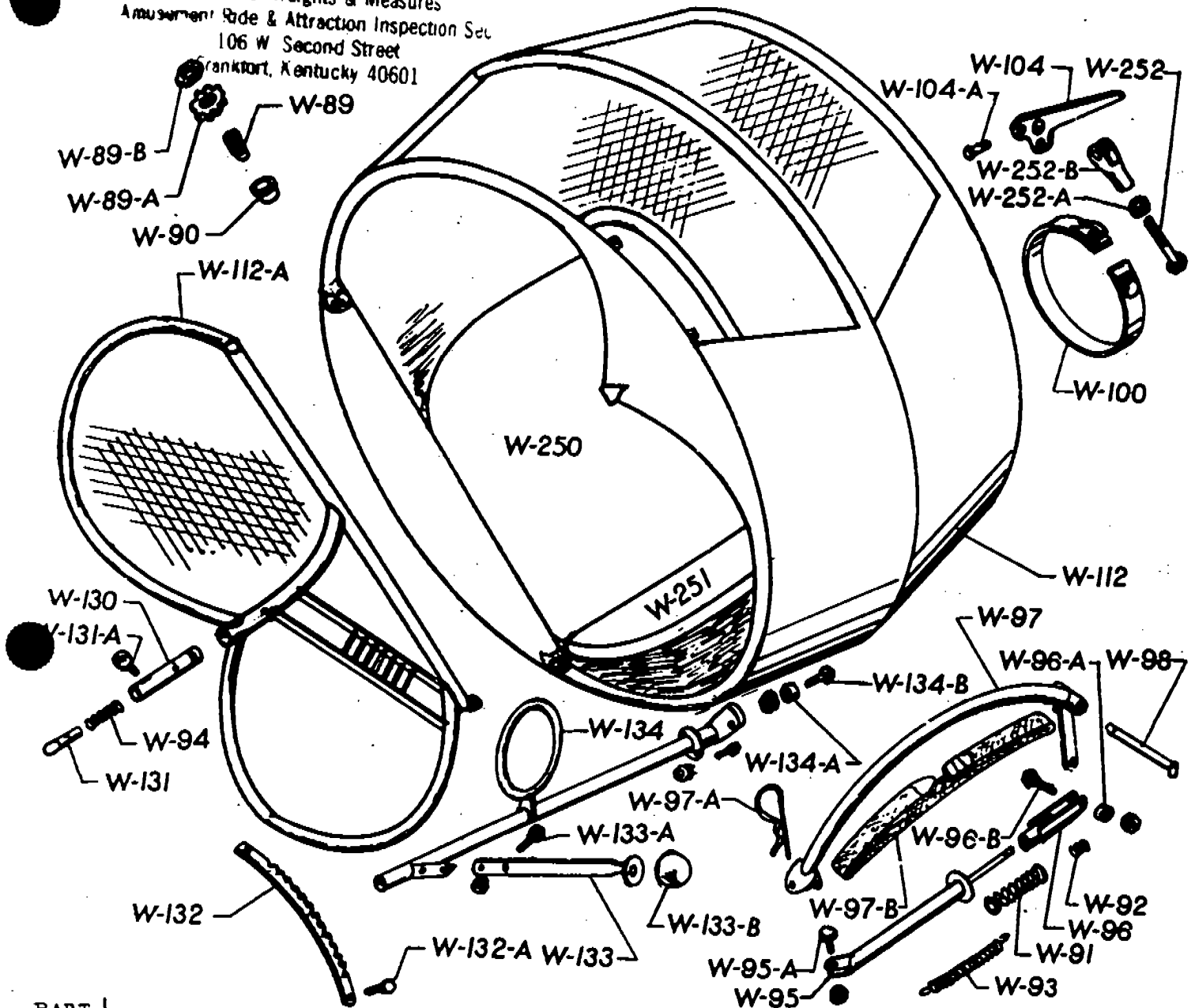




KY DEPT OF AGRICULTURE  
Division of Weights & Measures  
Amusement Ride & Attraction Inspection Sec.  
106 W Second Street  
Frankfort, Kentucky 40601

# CAR ASSEMBLY

Rock-O-Plane



PART NO.	NAME OF PART	NO. REQ.	PART NO.	NAME OF PART	NO. REQ.
W-89	PIN, Car hinge	16	W-104-A	PIN, Cam lever	16
W-89-A	WASHER, Hinge lock	16	W-112	ASSEMBLY, Car	8
W-89-B	NUT, Hinge	16	W-112-A	DOOR, Car	8
W-90	BUSHING, Hinge	16	W-130	TUBE, Door latch	8
W-91	SPRING, Belt pressure	8	W-131	PLUNGER, Door latch	8
W-92	SPRING, Belt cushion	8	W-131-A	KNOB, Door latch	8
W-93	SPRING, Belt lift	8	W-132	RATCHET, Car brake	8
W-94	SPRING, Door latch	8	W-132-A	BOLT, Ratchet	16
W-95	ROD, Belt tie	8	W-133	LEVER, Car brake	8
W-95-A	BOLT & NUT, Belt tie rod hinge	8	W-133-A	BOLT & NUT, Brake lever	16
W-96	CLEVIS, Belt tie rod	8	W-133-B	BALL, Brake lever	8
W-96-A	SPACER, Clevis	8	W-134	ASSEMBLY, Car brake rod	8
W-96-B	BOLT & NUT, Clevis	8	W-134-A	ROLLER, Car brake cam	8
W-97	BAR, Belt	8	W-134-B	BOLT & NUT, Cam	8
W-97-A	CLIP, Belt bar safety	8	W-250	BACK, Car seat	8
W-97-B	BELT, Safety	8	W-251	BOTTOM, Car seat	8
W-98	PIN, Bar hinge	8	W-252	BOLT, Car brake adjustment	8
W-100	BAND, Car brake	8	W-252-A	NUT, Adjustment bolt lock	8
W-104	LEVER, Car brake cam	8	W-252-B	CLEVIS, Car brake	8

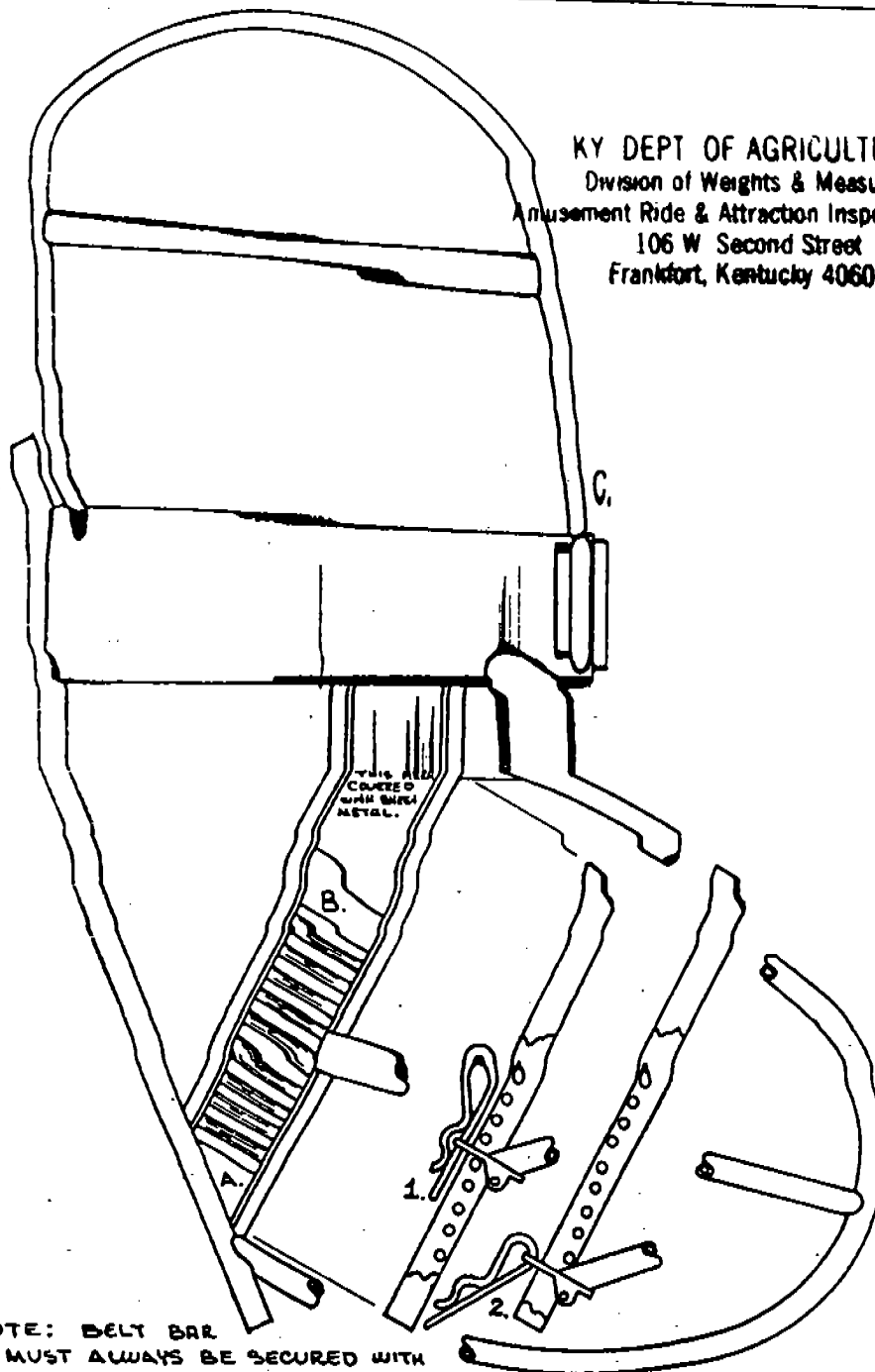
Attachment #78







KY DEPT OF AGRICULTURE  
 Division of Weights & Measures  
 Amusement Ride & Attraction Inspection Se  
 106 W Second Street  
 Frankfort, Kentucky 40601



**NOTE: BELT BAR**  
 MUST ALWAYS BE SECURED WITH  
 BELT TAUT OVER PASSENGERS BETWEEN UPPER AND LOWER DOOR  
 LADDER RUNGS. SPRING SAFETY KEY MUST BE RETAINED AT FIRST DETENT  
 (FIG. 1). IF BELT BAR IS IMPROPERLY SECURED BELOW BOTTOM RUNG (POINT A)  
 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 SEPERATE 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  
 FILLING AREA TO WITHIN 1/2" OF NEAREST LADDER RUNG. ATTACK BY WELDING.

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

#### DOOR MODIFICATION BULLETIN

DRAWN BY: N.E.R.	SCALE: NONE	NO REQ'D:	MATERIAL:
DATE: 4-6-78	NEXT ASSY:	QDS NO:	QDS BY NO:



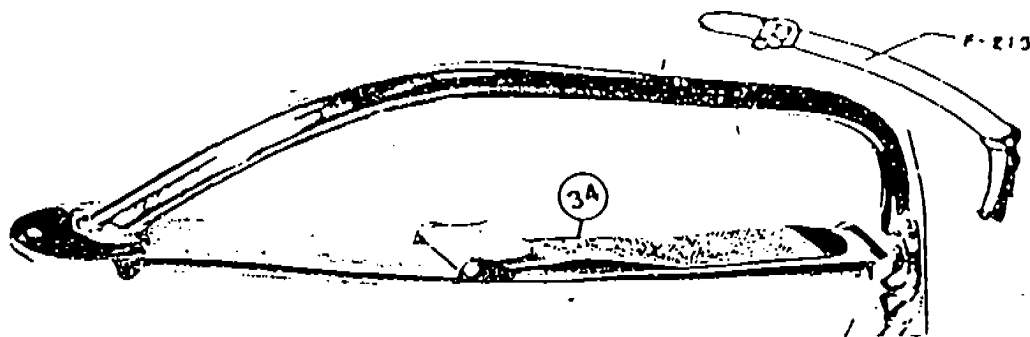
Org. No. L-B-78

Attachment 11

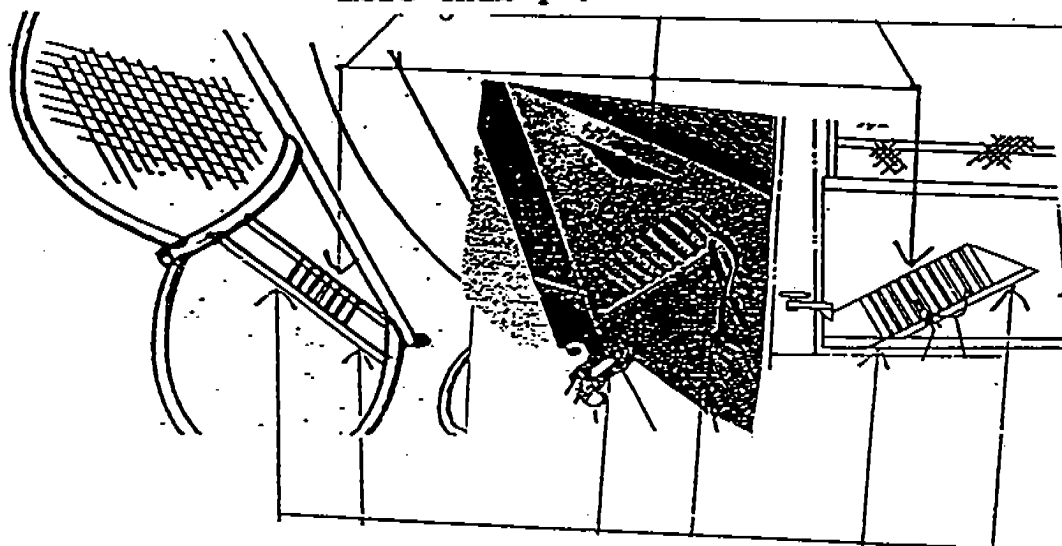




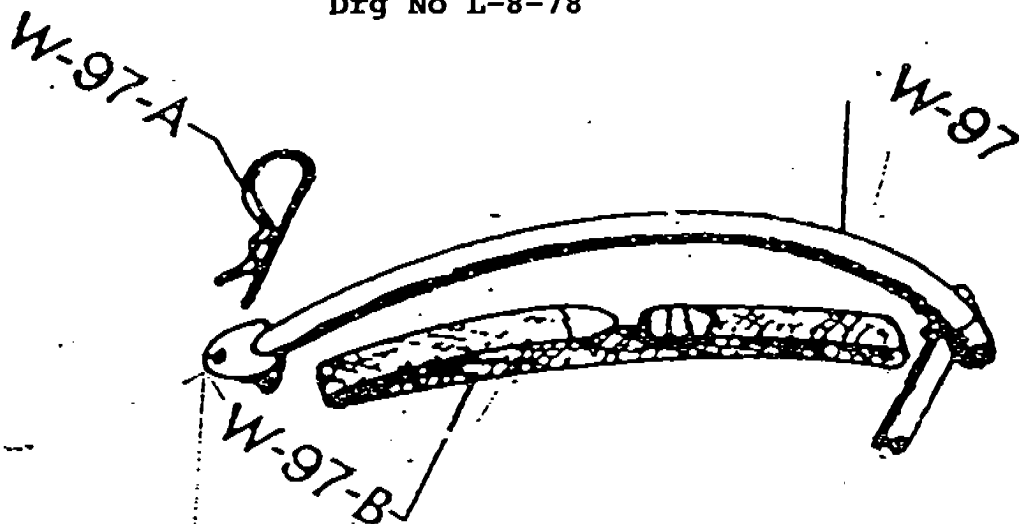




Spacing on installed bar on door(s) not more than  $\frac{1}{2}$ ".



Upper and Bottom Filler Plate  
Door Modification Bulletin dated 4-6-78  
Drg No L-8-78



Space between inside of hole to outside of metal no less than  $\frac{3}{8}$ "

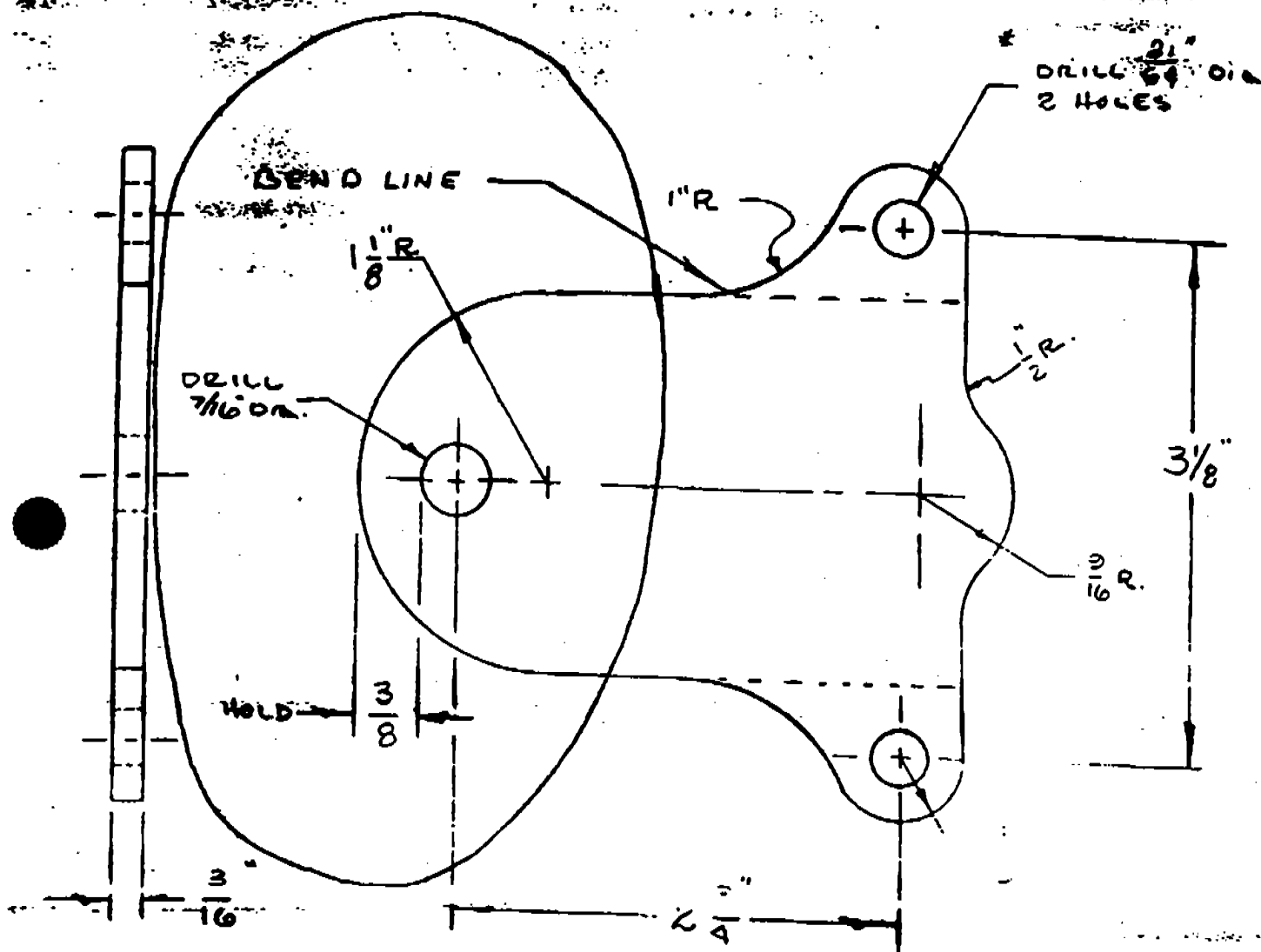
KY DEPT OF AGRICULTURE  
Division of Weights & Measures  
Amusement Ride & Attraction Inspection Sec.  
106 W Second Street  
Frankfort, Kentucky 40601

Attachment 12









\* WAS DRILL 11 32 DIA. 2-3-75

# L L BELT BAR BRACKET

APP'D BY:	SCALE:	NO. REQ'D:	MATERIAL:
W-97	FULL	1/CAR	BURN FROM 3/16" MSR
TEL:	NEXT ASSY.:	SOS. NO.:	EFF. W/SN:
14-71	W-97	SOD BY NO.:	EFF. W/SN:



Dwg. No. 11-97-D

U-97-16







ORI

## OREGON RIDES INC.



MEMBER

ROCK - O - P L A N E CHECKLIST

(Device) Name \_\_\_\_\_

Serial # \_\_\_\_\_

Inspection Date \_\_\_\_\_

Inspected By \_\_\_\_\_

Please refer to the proper factory Parts Catalog and Operating Instruction Manual for detailed explanation of Inspection and Maintenance procedures. (Additional copies are available from us) In addition to your routine inspection and maintenance, the following items should be checked:

DESCRIPTION	WHAT TO CHECK	OK/ /BY	DATE	NOTES AND REMARKS
1. Mudsills	Check for cracks or structural damage			Notify O.R.I. if damage or cracks are discovered.
2. Sweeps				
3. Column				
4. Car Hubs	Looseness on spindle when lock nuts are set.			If spindle turns in car hub when lock nuts are tight, install car hub kit # W-423. Replace tapered inner nut and washer if worn or damaged.
5. Car Spindle	Visually check for wear or damage			If spindle is worn or has been welded on, replacement is ABSOLUTELY NECESSARY.
6. Car Brake	Drum wear, worn bolts, enlarged bolt holes.			Any looseness requires drum bolt or drum replacement.
7. Door Latch & Hinge	Correct alignment			Align and remove play (See operating and parts manual)
8. Mudsill Tie Rods	Bent or cracking at the head, damaged threads.			Replace if any of these conditions exist.
9. All pins & Safeties	pins should fit snug. safeties should be tight			Replace if loose or damaged with factory pins ONLY.
10. Cars	Broken or worn tubes, loose or cracked screen			Notify O.R.I. for repair procedures on tubing. Repair or replace screen.

P.O. Box 9066 • Brooks, Oregon 97305  
Office: (503) 760-1511 • Parts & Shop: (503) 390-9015 • FAX: (503) 390-4858



DESCRIPTION	WHAT TO CHECK	OK/ /BY	DATE	NOTES AND REMARKS
11. Automatic Belt Bar Assembly	Condition of all fasteners, lost or broken springs, 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 holes should be weld-filled and redrilled. Install new fasteners, keys and straps as required.
12. Car Brake Lever and Ratchet	Visually and mechanically check for wear & positive locking.			If brake lever fails to hold positively, replace worn components with new factory parts.
13. Car Brake Band	Check lining for wear & holding ability. Check cam & rollers for excessive wear, worn bolts & enlarged holes.			If holding ability is not adequate check all components, replace as necessary.
14. Drive Cable	Check for broken strands and kinks.			Replace cable if any of these conditions exist. Always keep a spare cable on hand.
15. Drive Wheel Liner	Check for wear or, deterioration			Replace liner if excessive wear or deterioration exists. Always keep a spare liner on hand.
16. Cable Shoe Liners	Check for wear or deterioration.			If cable runs to one side, replace rubber liners & check for proper cable alignment.
17. Sweeps & Cross Braces	Check that pins are snug & holes are not worn over-size.			If any looseness is found, pin holes should be reamed & factory oversized pins installed.
18. Seats & Floorboards	Check for loose bolts, broken or cracked seats, general condition			If any of these conditions exist, repair or replace as necessary.
19. Electrical Components	Worn or bad cords or plugs, light & brush assemblies.			If any worn or unsafe conditions exist, repair or replace with correct type & size wire or cable. Replace brushes or light rings if worn excessively.



DESCRIPTION	WHAT TO CHECK	OK/ /BY	DATE	NOTES AND REMARKS
20. Column Cable Idler	Alignment, looseness, worn parts.			Repair or replace as necessary.
21. Fluid Clutch	Looseness & leakage.			Tighten all bolts/nuts. Replace seals as required.
22. Universal Joints	Alignment & worn parts.			Repair or replace as needed.
23. Brake Drum & Band	Excessive wear, and lining condition.			Repair or replace as needed.
24. Rear end Pinion;	Oil leakage and looseness.			Replace seal. Tighten pinion bearing, locknuts.
25. Control Stand	Condition of ratchet & ratchet lug.			If handle will no longer lock in place, grind lug or replace with new handle. Ratchet quadrant cannot be ground. Replace.
26. Platform & Ramps	Damage or excessive wear.			Repair or replace as necessary.

ADDITIONALLY FOR PORTABLE MODEL

27. Cross Braces & Scissor Links	Damage or excessive wear, loose pins, & enlarged holes			Oversize or replace as necessary
28. Safety Cable Transport Cable Springs	Over-all safe condition. Excessive stretch.			If unsafe condition or excessive stretch exists. Replace.
29. All over - center attaching locks	Wear & proper adjustment.			Replace excessively worn parts. Adjust for positive locking.
30. Cross cables	Improper adjustment, worn parts.			Adjust or replace for proper tension.
31. Fifth wheel attachment to column	Cracks or structural damage.			If these conditions exist, notify O.R.I.
32. Idler arm attaching points	Looseness or damaged parts.			Repair or replace if any free play or damage exists.



DESCRIPTION	WHAT TO CHECK	OK/ /BY	DATE	NOTES AND REMARKS
33. Drive cable adjust assy	Interior missing parts, excessive wear, broken internal spring.			Repair or replace as necessary.
34. Drive Wheel Belts	Hardness, cracks, deterioration or missing.			Replace if any of these conditions exist.
35. Countershaft & Bearings	Alignment, loose bearings, general condition.			Repair or replace as necessary
36. Control Stand Brake Controls	Over-center locking cable, for wear or improper operation.			Repair or replace as necessary.
37. Drive Wheel Brake and Related Linkage	Excessive drum wear, lining, unsound linkages.			Repair or replace with factory parts. Replace worn bolts.

**NOTE:**

When ordering parts please give  
serial number of your machine along  
with part numbers from the Parts  
Catalog and Operating Instruction  
Manual.