

CABLE ANCHOR

SHEAVE ASSEM.

OVERHEAD BEAM GROUP

SHEAVE ASSEM.

REAR OVERHEAD
BRACE ASSEMBLY

POWER CONTROL
UNIT

LIFT CABLE

SHEAVE ASSEM.

BLADE

CUTTING EDGE

CORNER END

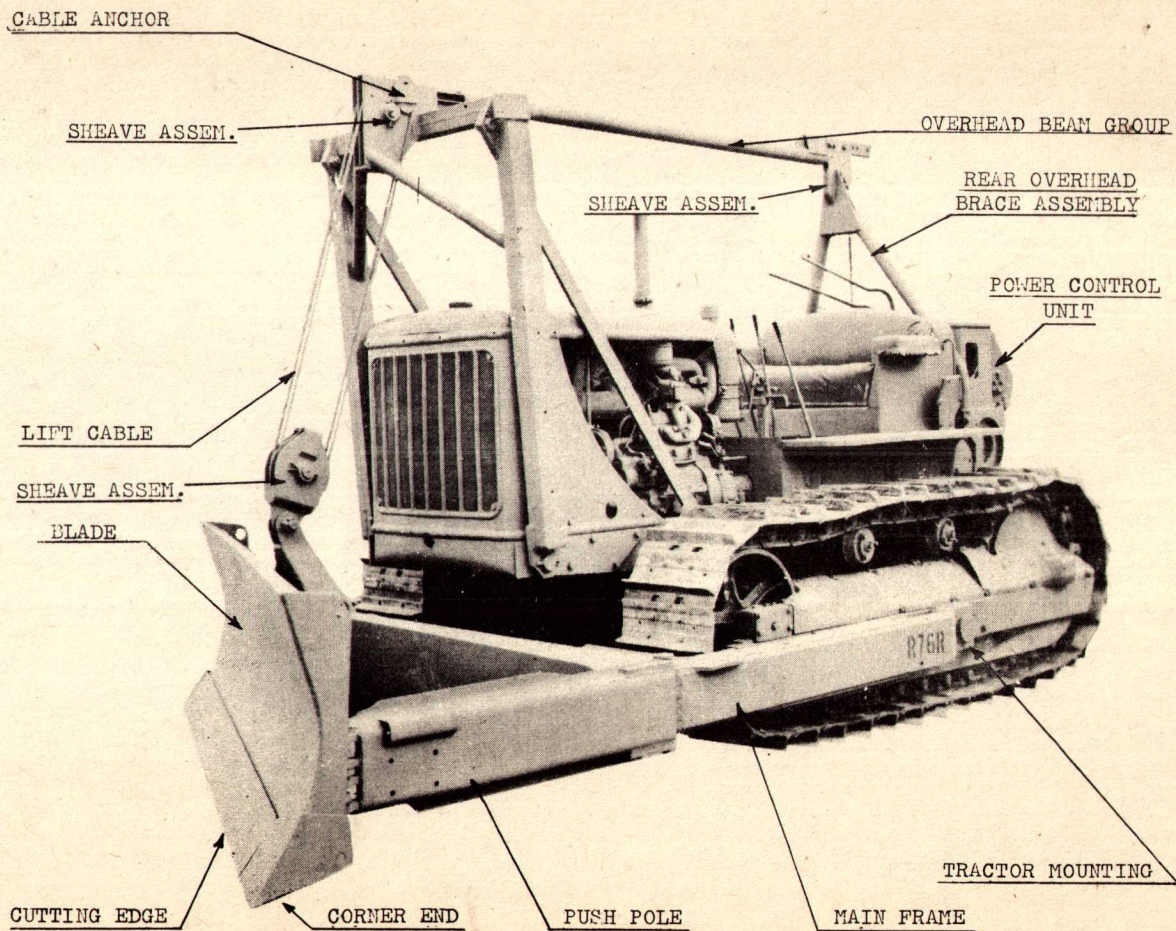
PUSH POLE

MAIN FRAME

TRACTOR MOUNTING

R76R GENERAL ARRANGEMENT

1



R76R TRAILBUILDER PARTS CATALOG

INDEX	Starting on Page
General Arrangement.	1
Description of Trailbuilder.	5
Safety Precautions	5
Abnormal Operating Conditions.	6
Operating Instructions	6
Blade Adjustment	8
Job for Trailbuilder	10
Lubrication Chart.	23
Maintenance Instructions	24
Trouble Chart.	25
Installation Instructions.	27
Parts Plates:	
Group	29
Blade	29
Main Frame and Lift	30
Push Pole	31
Tractor Mounting.	32
Overhead.	33
Overhead Beam	35
Rear Brace.	36
Radiator Guard.	37
Cable Arrangement	38

DESCRIPTION OF TRAILBUILDER

The R76R Trailbuilder is cable operated and is mounted on the model D7 Caterpillar tractor.

The trailbuilder is attached to the outside of the track frames on a pivot type mounting and is lifted by means of cable - threaded through a series of sheaves between the blade and overhead structure and threaded to the drum on the power control unit mounted on the rear of the tractor.

Any type power control unit which operates on the rear of the Caterpillar tractor may be used, as the overhead structure is so designed that it may be adapted to the different power units.

The blade is twelve feet in length, of reinforced, box type construction for strength, and designed so no down pressure is needed to make the blade enter the ground under normal conditions.

The blade may be angled 63° right or left or used as a straight bulldozer by simply removing the two rear push pole pins and relocating them in the different positions in the main frame.

The blade may also be oscillated up or down at either end by removing the front push pole pins and changing the position of the push pole in the blade locks.

SAFETY PRECAUTIONS

Never attempt to perform any greasing, maintenance, or repair operations on the tractor or trailbuilder without first making sure it is in such a position that it cannot move and trap a hand or foot.

Greasing should be accomplished with the blade resting on the ground and the tractor engine stopped. This will make it impossible for anyone to accidentally move the control lever and injure someone working on the machine.

Changing the cutting edge must be accomplished with the blade in the air, but under no circumstances should anyone be permitted to lie under the blade. The safe way is to raise the blade to the desired height, then shut the engine off and block under the side frames of the trailbuilder, so it cannot settle to the ground. Instead of lying under the blade, take a position to the front so that it will be unnecessary to have more than the hands or arms under the blade.

ABNORMAL OPERATING CONDITIONS

When operating on steep inclines, keep the tractor in gear at all times as the machine cannot roll faster than the gear in which it is being operated, whereas, if the master clutch is disengaged or the tractor shifted to neutral, serious consequences may result because of the tractor rolling too fast without the compression of the engine to hold it back.

On extremely steep inclines, it will be necessary to use the opposite steering clutch from that used in normal operation to steer the tractor if the weight of the tractor is pushing the engine while traveling down grade.

Where the weight of the trailbuilder frame and blade is insufficient to penetrate frozen ground, it may be found to be more economical to rip the ground with a ripper.

Do not wear the cutting edge down until it starts wearing on the bottom of the blade proper as the front and back sheets of the blade are welded together and if this weld is worn off, material will immediately lodge between the front and back sheets of the blade and damage it.

OPERATING INSTRUCTIONS

When the operator first gets on the tractor, with the engine running, he should practice lifting and lowering the blade, to get the feel of the controls and to find out which movement of the lever lifts the blade and which lowers it.

One of the most important things in operating a trailbuilder is to be able to lift the blade slowly each time and to lower it the same way. This will prevent digging holes and will make a smooth even cut.

It is much easier to make a smooth cut if the blade is kept full so the material can be seen above the blade.

When this amount of material is being moved, it will fill all the uneven spots ahead of the blade and leave level ground over which the tractor can travel.

When cutting hard material and the engine becomes overloaded, the blade should be lifted slightly. The most satisfactory way to prevent the Engine stalling is to release one steering clutch, which cuts the load of the engine in half. The control lever should be placed on hoist or lift simultaneously lifting the blade slightly and as the engine picks up, the steering clutch should be released, placing the full load on the engine.

NOTE:

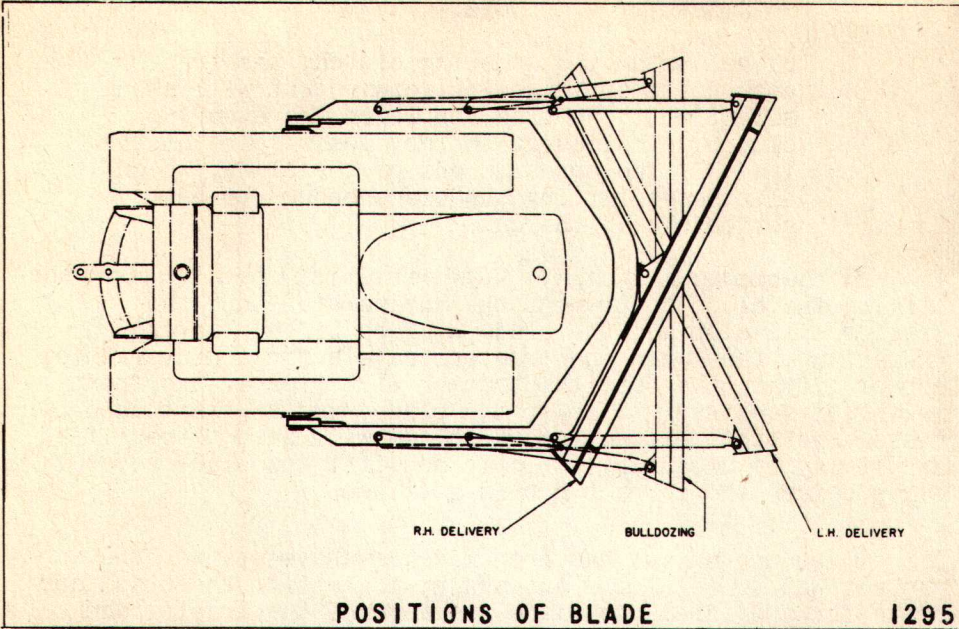
By releasing the steering clutch, the tractor does not stop traveling forward but will swing slightly to the side, on which the steering clutch is released, thereby losing part of the load off the opposite end of the blade, which eliminates lifting the blade enough to be noticeable in the cut.

If the master clutch, (or flywheel clutch) is disengaged when lifting the blade to prevent the engine stalling, the tractor will stop and the blade will be lifted leaving an uneven cut, then when the tractor travels forward over this abrupt lift in the cut, the tractor will rise at the front, making it necessary to lower the blade, and as the tractor passes over the obstruction the blade will have to be lifted, and it may be necessary to lower and lift the blade several times before the correct cut is attained.

If an uneven cut has been made as above stated, the easiest way to level the cut again, is to lift the blade and drive forward, drop the blade and reverse the tractor and drag the material back into the low spots, thus leveling up the grade or cut. In some instances it is necessary to lift the blade slightly to allow the material to pass under the blade at the desired places.

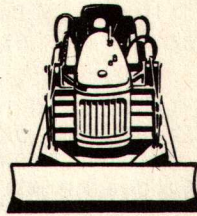
Different trailbuilder jobs require different adjustments of the blade. For example, it may be desirable to deliver the material to one side or the other. It may be necessary to dig deeper with the point of the blade one time than it is another. There are a number of adjustments, all of which can be made without any tools whatever, so that either end of the blade can be tilted up or down, and either end of the blade can be angled. And, of course, any number of combinations of these adjustments are available.

BLADE ADJUSTMENT



BLADE IN BULL-DOZING POSITION

To adjust blade for bulldozing. Remove pin 1 from rear end of pushpoles on right and left hand side of tractor. Swing blade until right angle with frame and tractor, insert pins.



NOTE: Jaw 2 on end of pushpoles mesh with jaws on back of blade, pin 3 locks blade in position.

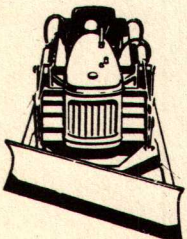
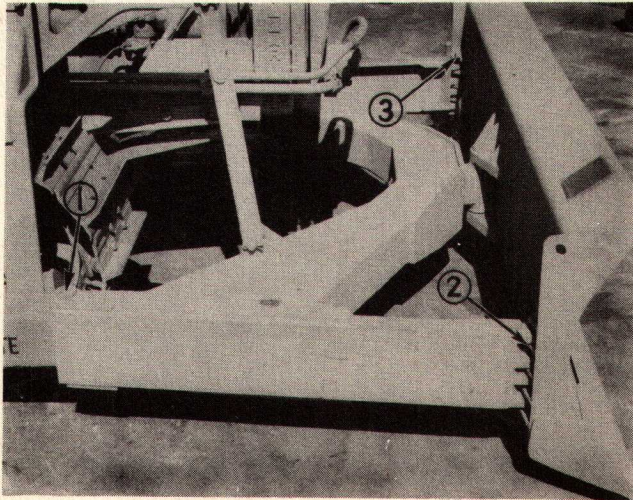


Plate No. 1-A

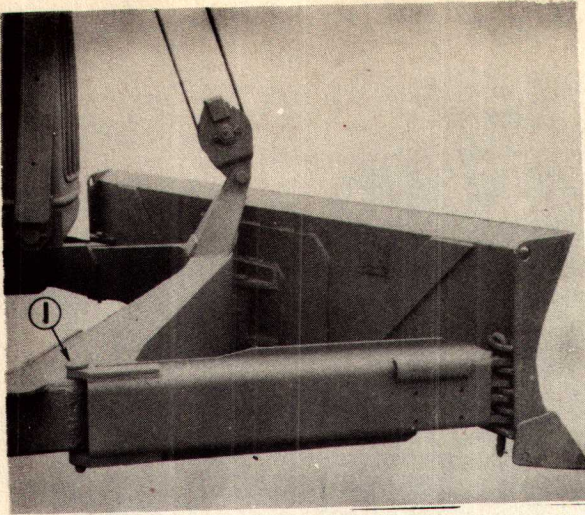


Plate No. 2-A

NOTE: Position of blade pushpole and main frame 1 and pin 2 in contrast to the same parts shown in plate No. 2-A

BLADE TILT

L.H. end of blade, showing blade tilted down.

NOTE: Interlocking Jaws 1 on end of pushpole and back of blade.

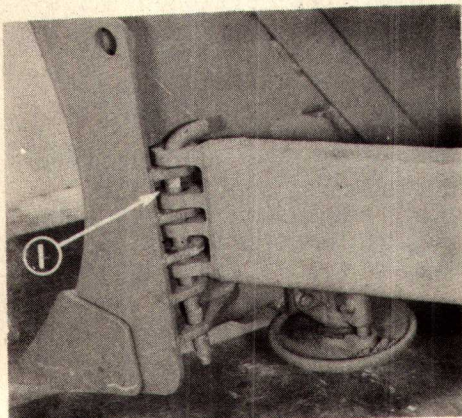


Plate No. 4

BLADE ANGLED

Receiving end of blade angled for left hand delivery. To angle blade remove pin 1 from rear end of pushpole and corner of main frame on R.H. and L.H. side of tractor, push end of blade forward for R.H. or L.H. side delivery as desired and replace pins.

BLADE ANGLED

Receiving end of blade for right hand casting.

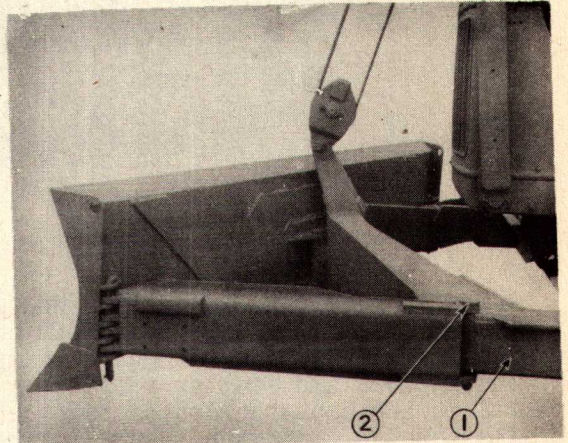


Plate No. 3-A

To tilt the blade remove pins from Jaws 1 at back of blade, and end of pushpoles on R.H. and L.H. end of blade.

Disengage the jaws at back of blade and pushpole, tilt blade up or down as desired, engage the jaws with the pushpoles and replace pins.

THE JOB FOR TRAILBUILDER

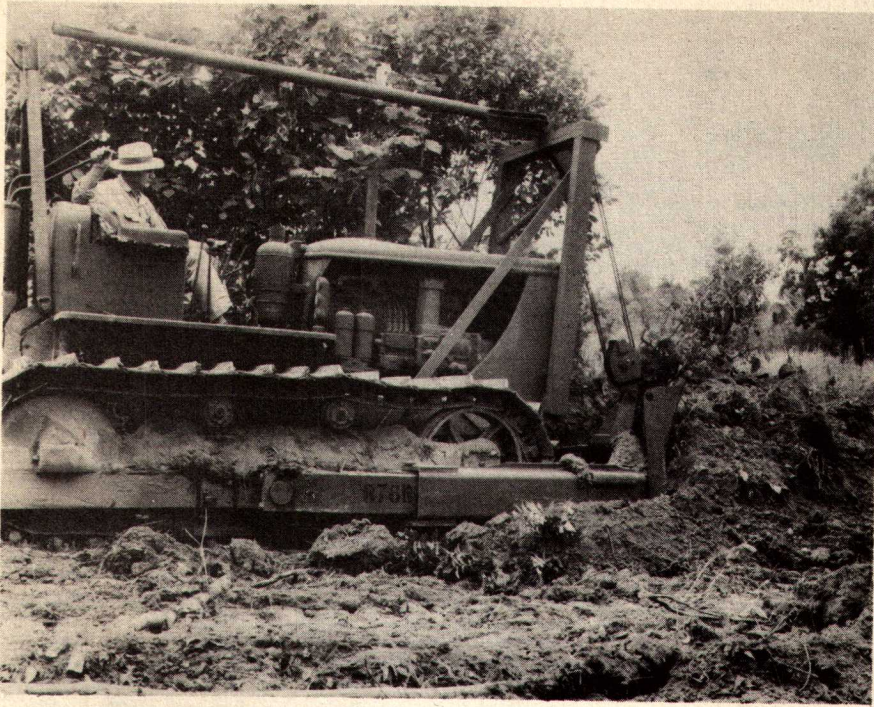


Plate No. 1

Trailbuilders are primarily designed for pioneering trails through hilly or mountainous country, for clearing right-of-way for roads, airports, camp-sites, reservoirs, training bases and similar projects. They are especially useful in the construction of ramps and in the building of trails through dense jungle. Handling rocks, logs, stumps and debris is easy and practical with these efficient units.

Another useful field for the Trailbuilder is in trenching and backfilling work, such as oil field pipeline, tiling, sewer and other similar work. Open pit mines find them invaluable in stripping and haul road construction. Road builders fill in around culverts, bridge abutments and use them for traffic by-passes during road construction. Most contractors on industrial plant expansion jobs do much of their excavation work with Trailbuilders and backfilling around basement walls is economically and efficiently done with the same tool.

PIONEER TRAILBUILDING

The Trailbuilder is such a versatile tool that it may be used successfully and economically in any or all phases of

pioneer roadbuilding, such as clearing, ditching, bank-sloping and finishing.

The first step in any pioneer trailbuilding must necessarily be to clear the trees from the proposed right of way, if in timbered country.



Plate No. 2

CLEARING

In removing large trees and stumps, it is necessary to push some of the earth and roots away from the base of the tree or stump. With the blade angled and tilted, cutting close to the tree is easy, thus loosening it so that removal is simple. When pushing the tree or stump, the center of the blade should be placed against it as high as possible for maximum leverage. To get the greatest lifting power, use the



Plate No. 3



Plate No. 4

heel or end of the blade nearest the tractor, This will eliminate lifting the rear of the tractor from the ground. The "Hoist" should be applied when pushing, but it should not be left on continually. Apply it and if the load is too great, place the lever on "Hold" until the tree or stump is loosened more by pushing or by digging around it. Push the tree until it starts to lean or fall - then back away immediately and drop the blade below the roots and push the tree out. Never

drive over the stump while the tree is falling as it is possible for roots to come up under and behind the blade.

In clearing, if trees are to be removed, the tractor should start at the lowest point to be cleared, unless it is possible to push all the material in one pass with the machine. With the blade angled, drive up to the tree in low gear and make contact easy. Do not strike the tree at high speed as the top of the tree may break out, damaging the machine. or injuring the operator. Nothing is gained by this type of work, Place the blade high on the tree in making contact and try to have the tractor on good footing, so the thrust will fall the tree out of the right-of-way and not on trees to be cleared later. The trees when felled will push into the nearby forest easier lengthwise than crosswise.

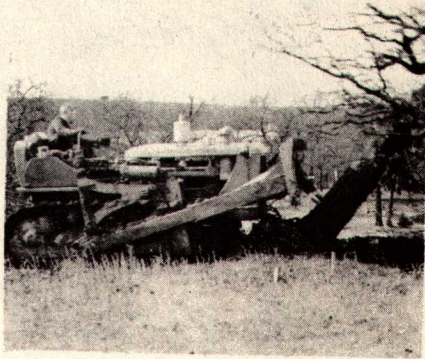


Plate No. 5

Next, rough-cut the trail, as shown in plates 1, 2, and 6 with the blade angled to either side to suit the conditions.

If side casting on a hillside, keep the outside of the fill high and the ditchline on the inside low, as the fill will pack and settle from the weight of the machine. (See plates 6 and 8.)



Plate No. 6

Do as much of the side casting as possible while operating downhill, as the material will move much faster and with much less horsepower.



Plate No. 7

HILLSIDE

To clear sidehills it is necessary to bench in and move some earth with the trees and stumps. To bench in the blade should be angled with the leading or receiving end on the uphill side. This end of the blade should be tilted or lowered to the first adjustment below horizontal position. This adjustment is made at the back of the blade at the end of the pushpoles by first removing the two pins. One end of the blade must be lowered when the other is raised in tilting the blade. The jaws on the back of the blade are engaged with similar jaws on the end of the pushpoles, and the pins are replaced to lock the blade in place. The machine is then ready to operate.

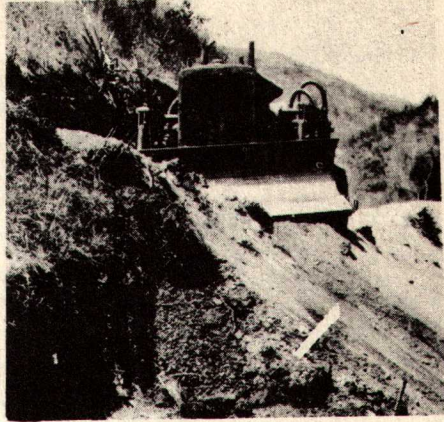
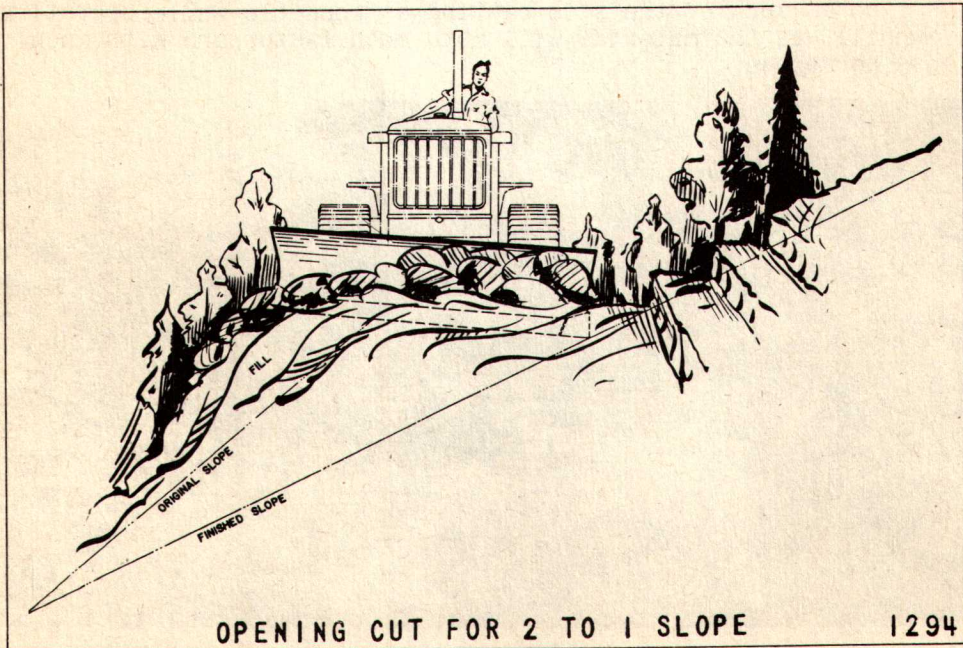


Plate No. 8

To get full efficiency from the tractor it should be kept as nearly level as possible and worked downhill as much as the job will permit.

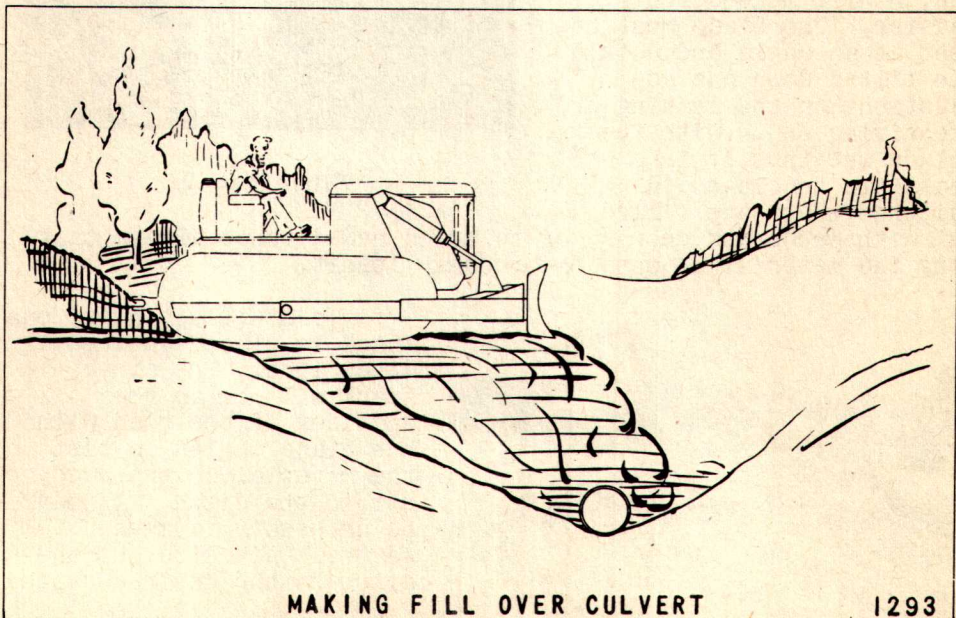


To start, make a couple of passes about twice the length of the tractor with the receiving end of the blade doing the cutting. This provides a small bench from which the machine can start actual operations. The track on the high side will be following the cut and the track on the low side will be travelling on the loose material thrown out by the blade. As soon as enough material has been cast out to support the track and to hold it about six inches higher than the track in the cut, it is advisable to travel farther forward on each pass as long as the tractor doesn't tilt too much.

If a slope of two to one is desired for the upper bank, a first cut should be made only one foot deep. Then the tractor should be moved so the next cut will start two feet from the ledge left by the first cut. The slope will be cut thus in a series of steps. The steps can be trimmed off later by running the tractor along the slope, with the blade lowered just enough to cut off the steps. This will provide a two to one slope for the bank and the material removed is available for the fill for the road itself which should be kept slightly higher on the outside.

FILLING

The blade must now be adjusted to bulldozing position. This is done where a deep cut is to be made and where it is necessary to move material some distance. In making the fill, the blade should be picked up slowly as the edge of the fill is reached, leaving it a little higher. This is done because there is apt to be more settling at the edge of the fill than in toward the cut.



MAKING FILL OVER CULVERT

1293

When making a fill over a culvert, it would be possible to push the culvert out of line or crush it with the weight of the tractor if the material used to fill in over the culvert were not properly placed. To do this job correctly, the fill should be kept up to grade, and the tractor should be kept as near level as possible, pushing and spilling the material over the edge of the fill. In this way, by the time the tractor reaches the culvert it will have two or three feet of fill between it and the culvert.

If an uneven cut is made or a hole is gouged out at the beginning of a grade, the blade should be raised, the load dumped and the tractor driven far enough ahead to let the blade drop on the far side of the load. Then the tractor is reversed and down pressure is applied lightly, moving control lever from down pressure to "Hold" and alternating while backing up. The control lever should be placed on "Float" while passing over the low spot. In some cases where the hole is particularly deep, it may be necessary to raise the blade a little, then placing the control lever on "Hold" so the load will spill under the blade.

DITCHING

For cleaning existing ditches or for constructing drainage ditches along new roads, the same general principles of operation are applied. Of course, certain blade adjustments must be made and there are a few suggested operations which will make ditching easier. The blade must be set at an angle and should be tilted down one adjustment on the leading or receiving end. With the blade set thus it is possible to clean old ditches that have filled up with weeds and debris, or to build new ditches always casting the material up onto the roadway itself.



Plate No. 9

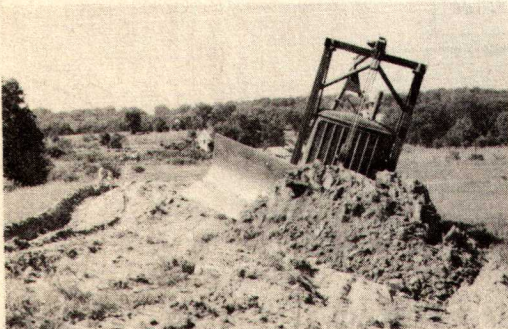


Plate No. 10

To start ditching, one track is placed in the ditch line. The other track will be on the shoulder of the road with the blade angled to cast the material on the road, not in the ditch. It may be necessary to make several passes to cut the ditch to the desired depth.

If too much material is cast up on the roadway before the ditch is finished, it may be necessary to make a pass or two on the road to pull the earth back away from the ditch. To do this the blade should be levelled up but kept angled.



Plate No. 11

If a ditch is desired on each side of the roadway, it may be cut as illustrated on Plate 10, with the blade angled and the point down one or two positions in the blade lock as desired. Any depth ditch may be cut by making successive trips and cutting deeper. Each time a pass is made in the ditch, it will be necessary to pull the material over to the center as shown on Plate 11 and 12.

After the ditches are finished to the desired depth, the finishing of the roadway itself may be accomplished as illustrated on Plate 12, by making successive trips to level, with the blade angled, or in the straight bulldozing position.



Plate No. 12

BANK SLOPING

If it is desired to backslope the bank, the blade is used in angling position and the material is cast into the ditch, where it is later removed as indicated in the operation described above.

It will be found most satisfactory to set the point, or receiving end of the blade, down one position, and the delivery end of the blade up one position in the blade locks while performing this operation; also that will be the correct position of the blade while performing any ditching operation.

Clean the ditch out immediately after the bank sloping operation. (See plate 13.)



Plate No. 13

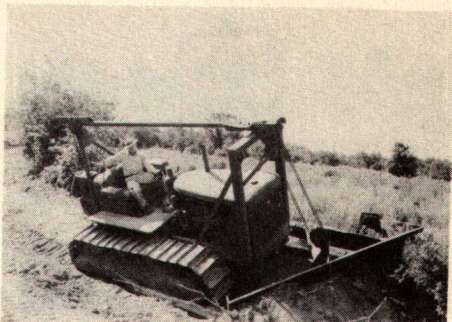


Plate No. 14

As the cut is worked down, slope the bank, leaving the blade angled and the point or receiving end down one position in the blade lock. (See plates 13 and 14.)

OIL FIELD SLUSH PITS AND TRENCHES

To open a slush pit or ensilage trench the blade is best used in bulldozing position, straight across the front of the tractor. This is done to push the material out of the trench, which usually has vertical banks on the sides and the ends of which slope upward from the center. A number of passes will be required to bring the trench to the proper depth.



Plate No. 15

At the end of each pass the tractor is reversed and backed through the trench rather than turned around unless it is desirable to push material from each end of the trench.

When the slush pit has served its purpose and is to be filled the material which was pushed out originally is used. Naturally it is impossible to drive out into the soft slush. Therefore, when the material

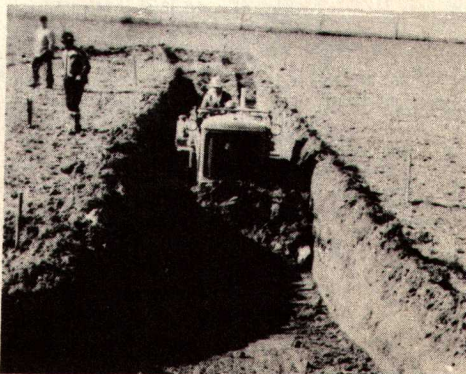


Plate No. 20

is pushed ahead of the blade and as it approaches the pit, the blade should be raised and the material is spilled under the blade so that there is always dry earth under the tractor. Repeated passes until the pit is filled with dry material will eliminate the danger of the tractor bogging down in the slush.



Plate No. 21

After an ensilage pit has been filled with feed, in most cases it is desired to cover this feed with the original earth. The same procedure is followed for this as is used with slush pit filling except that even more care must be exercised in keeping the fill material to the proper depth, and in avoiding damage to the trench walls.

BACKFILLING SEWERS AND PIPE LINE TRENCHES

One of the most economical and efficient methods of backfilling sewers, pipe line and tile trenches is by the use of the Trail-builder. This is done with the blade angled but not tilted. The tractor is driven alongside and parallel with the ditch or trench, casting the material into the trench. Where material has been cast on both sides of a ditch, it will usually be possible to backfill it by making a pass on one side, returning down the other side for one pass and completing the filling with a final pass on the first side. This avoids changing the blade angle. Any length ditch may be filled in this manner.



Plate No. 22

FINISHING

For finishing grade and bringing it to correct specifications, certain adjustments of the blade are necessary. The blade should be levelled up horizontally, but may be angled to cast the material to the right or left, or placed straight across the front of the tractor in bulldozing position, for drifting the material forward.



Plate No. 23

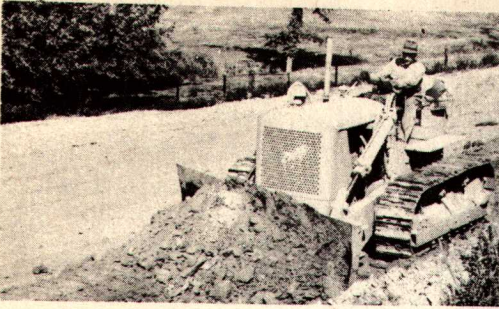


Plate No. 24

dig in on the lower end of the blade. After part of the work is levelled it is advisable to let the blade overlap the finished work far enough so that one track will always travel on the finished work. By watching this end of the blade now and then, the cutting edge can be kept at the ground line, but not cutting on the finished side. The rest of the job will be easy.

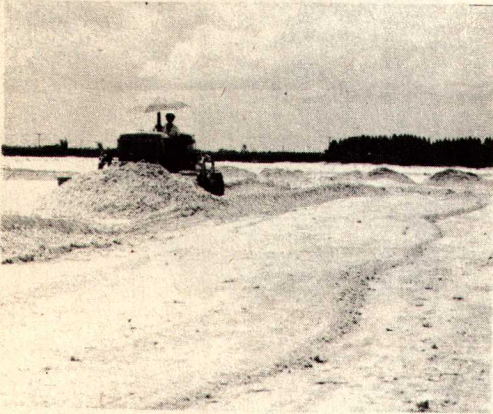


Plate No. 25

get in back of the material to push, the blade may be lifted up and over the material, dropped on the opposite side, the tractor reversed and the material dragged away. The material may then be spread in the usual manner.

REMOVING SNOW FROM TRAILS, ROADS, HIGHWAYS AND DRIVEWAYS

Light snows and even heavy drifts can be moved with the Trailbuilder.

If the snow is to be cast off the road, angle the blade so the snow will be cast to the side desired. The snow will cast better when the tractor is traveling in the higher speeds.

If the ground is very uneven, it will be necessary for the operator to first level a small place from which to start operations. Always start cutting when the tractor is level or from this initial starting point. Do not start cutting when the tractor is tilted to either side because the farther the tractor travels ahead the more it will tilt and the more it will

Some material can be levelled off by dragging the blade while backing up. It is much easier for the beginner to finish in this manner. Anything which speeds up any operation makes it just that much easier and more efficient.

Where material has been cast out by shovel or other means and it is desired to remove it from the edge of the cut, as in the case of industrial building basements, quarries or other projects where it is impossible to

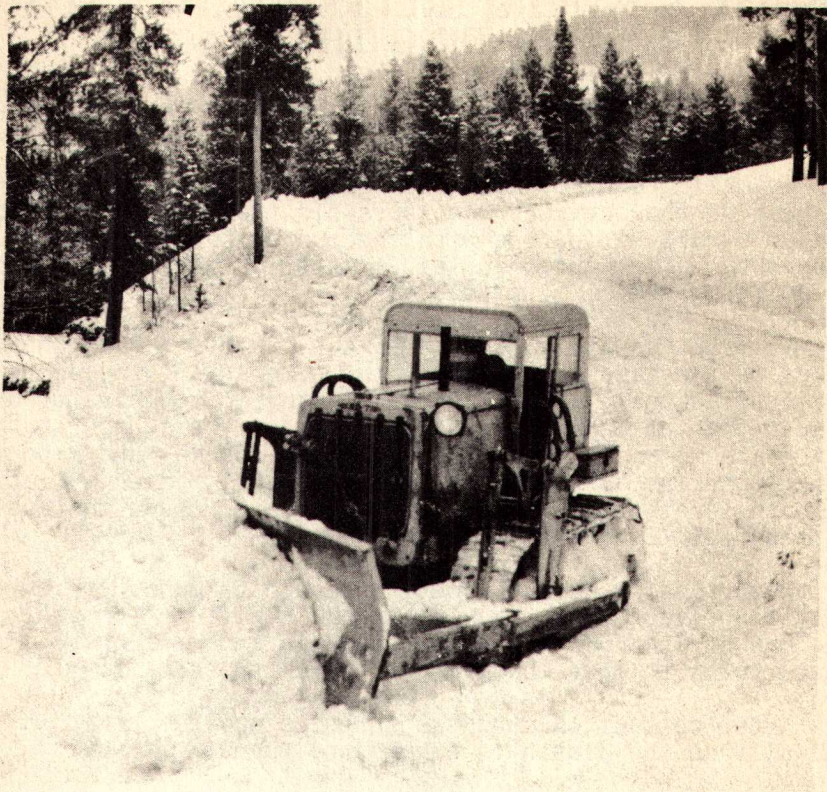


Plate No. 26

After making a pass or two and trying the different speeds, it can be determined which speed will be the most efficient. In most cases the higher speeds can be used; and with the higher speed several miles of road may be kept open.

Sometimes it is necessary to push the snow out of a cut on the road or out of a drive way where it can't be cast to the side. The blade should be adjusted to Bulldozing position for this job. First, open up a channel near the center of the road by pushing through.

In most cases it is advisable to return in reverse gear unless the distance is too great. Always eliminate turning when possible as the snow will pack in the tracks, sprockets and other parts of the machine and may cause damage--gather up the snow and push through the channel made at the beginning. The channel will keep the snow in front of the blade making it possible to push much more snow each trip. Keep the channel intact as long as possible for maximum loads.

PUSHING SCRAPERS, TRUCKS, ETC. AND LOADING OR UNLOADING THE TRACTOR

Often the Trailbuilder is used to push scrapers, enabling the operator to pick up capacity loads in shorter distances.

In making contact with the blade to the push block on the rear of the scraper, when possible the lead tractor and scraper should be in line with the pusher before contact. Make contact easy and when lead tractor on scraper has stopped for shifting gears, if possible.

If tractors are of the same make and size, they should be worked in the same gears and at the same engine speeds to prevent track slippage on either tractor. The operator on the scraper tractor should control the cut of the scraper to prevent the stalling or slipping of the tracks, and keep in as straight a line as possible, moving steadily ahead and making a smooth level cut. The higher the forward speed the easier the material will be to pick up.

When pushing trucks, contact should be made more carefully to prevent damage to the truck. Shift to low gear and idle the engine down as low as possible and still have just enough power to move the tractor in making contact.

After contact is made the throttle may be opened gradually as the clutch is engaged to push the truck.

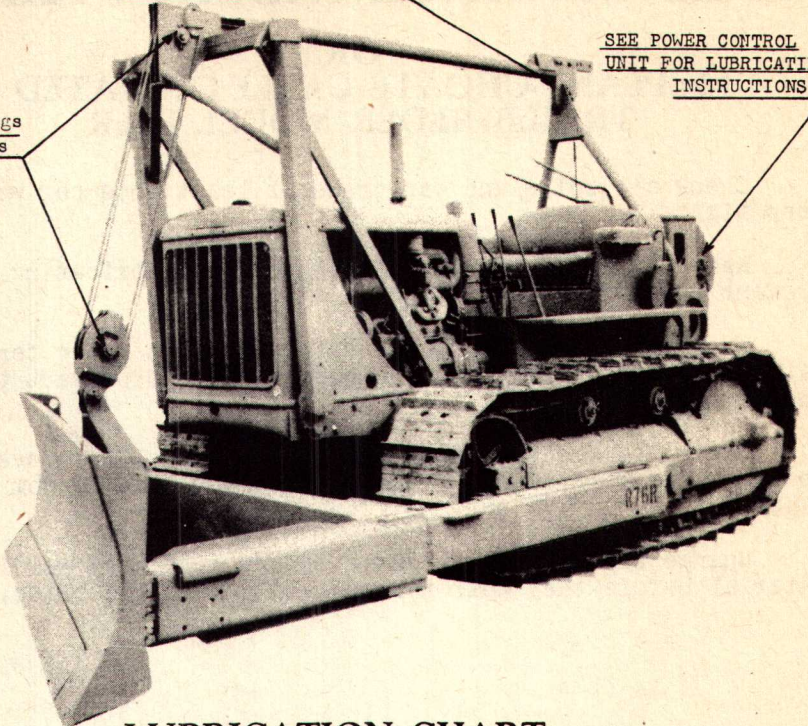
When working the tractor in close quarters, or in loading or unloading it, shift to low gear and idle the engine down as stated above, so the tractor can be moved more slowly and without slipping the clutch. Do not hold the clutch part way in or out, either engage the clutch or place it in neutral.

Always idle the engine if it is desired to move the tractor more slowly than low gear provides at normal throttle speed.

Sheave Bearing CG 8 hours

SEE POWER CONTROL
UNIT FOR LUBRICATING
INSTRUCTIONS

Sheave Bearings
CG 8 hours



LUBRICATION CHART

KEY TO LUBRICANT

CG-GREASE, general purpose No. 1 (above +32° F.) No. 0 (+32° F. to 0° F.) OE-OIL, engine Crankcase grade
--

Note: Keep cables well lubricated with OE except those coming into constant contact with dirt.

MAINTENANCE INSTRUCTIONS

FOR LaPLANT-CHOATE CABLE-OPERATED TRAILBUILDER MODEL R76R

Check all bolts and capscrews at least once per week and keep tight.

Keep the cable lubricated with engine lubricating oil to prevent rust and corrosion.

When operating, the cable should be kept under tension with part of the weight of the blade on it to prevent tangling and damage to the cable.

The cutting edge is reversible, and should be reversed before it is worn down far enough to damage the bottom of the blade.

Change blade corner ends or reface with hard welding material before they wear through and damage the blade.

TROUBLE CHART

TROUBLE	POSSIBLE CAUSE	REMEDY
Failure of blade to lift.	Clutch on power unit not adjusted properly.	Adjust clutch.
	Worn clutch linings.	Reline clutch if necessary.
	Grease or oil on linings.	Follow instructions issued covering power unit.
Failure of blade to hold up.	Brake not adjusted properly.	Adjust brake.
	Oil or grease on lining.	Clean lining.
	Lining worn.	Reline if necessary.
Blade wearing off at bottom.	Failure to reverse or replace cutting edge in time.	Reverse or replace cutting edge before blade bottom starts to wear.
Failure to hold level grade.	Operating speed too high.	Operate in first gear with not over one-half throttle while finishing grade.
	Leaving control on lift or lower position too long when changing position of blade.	Move control quickly from hold to hoist and back to hold, so blade will be lifted slightly.
	Trying to start grade on very uneven ground.	Always level area to start grading from.
Having continual trouble keeping steering clutches and master clutch adjusted.	Failure to fully engage clutches after disengaging.	Never engage master clutch only part way in. Return steering clutches to full engaged position immediately after using.
Unable to steer tractor when pushing load.	Blade too full of material to push when one steering clutch is released.	Lift blade slightly before trying to turn.

TROUBLE	POSSIBLE CAUSE	REMEDY
Unable to keep blade loaded when moving material considerable distance.	Failure to provide channel for blade to operate in.	Follow same pathway each time so material will windrow on each end of blade and hold blade full.
Unable to control tractor on steep inclines.	Failure to keep tractor in first or second gear and master clutch engaged.	Use compression of tractor engine to hold down speed and use opposite steering clutch from that used in normal operation if tractor is pushing engine.

INSTALLATION INSTRUCTIONS

R76R Trailbuilder

For use with Caterpillar D7 Track Type Tractor and rear power unit.

To Mount Tractor Mounting Group

Place RH tractor mounting group #47398 over holes provided in outside of track roller frame and secure in place with 8 #4976 USS capscrews 7/8" x 2-1/2" and 8 #588 lockwashers 7/8". Refer to parts plate #1311, page 32.

Place LH tractor mounting group #47399 over holes provided in outside of track roller frame and secure in place with 8 #4976 USS capscrews 7/8" x 2-1/2" and 8 #588 lockwashers 7/8". Refer to parts plate #1311, page 32.

To mount overhead group, refer to parts plate #1510, page 34. It is necessary to remove Caterpillar radiator guard as this guard cannot be used with LaPlant-Choate equipment.

Remove #52871 RH and #52872 LH overhead brace assemblies. **IMPORTANT:** Do not remove #47411 RH and #47412 LH overhead mounting plate assemblies. Lay #52877 overhead assembly forward in horizontal position and bolt #47411 RH and #47412 LH overhead mounting plates to holes provided in front of tractor motor frame with 10 #22315 USS capscrews 7/8" x 3", 10 #3880 USS Hex. nuts, and 10 #558 lockwashers 7/8". Bolt #52871 RH and #52872 LH overhead braces in place on bottom of motor frame using 4 #5134 SAE capscrews 3/4" x 2-3/4", 4 #2750 SAE Hex. nuts 3/4", and 4 #556 lockwashers. Do not draw bolts tight. Swing #52877 to vertical position and fasten top to #52871 and #52872 braces using 2 #5288 SAE capscrews 1-1/4" x 3-1/4", 2 #2761 SAE Hex Nuts 1-1/4" and 2 #564 lockwashers 1-1/4". Tighten all bolts.

Install #47471 LaPlant-Choate radiator guard to #52878 overhead group, using 6 #5092 SAE capscrews 1/2" x 4-3/4", 6 #2741 SAE Hex Nuts 1/2" and 6 #552 lockwashers 1/2".

Install #50657 RH rear bracket and #50658 LH rear bracket on rear of tractor transmission case using the 4 #50652 studs provided. Refer to parts plate #1421, page 36.

IMPORTANT: If a Caterpillar power control unit is used, these parts #50657-58 must be installed with the upper, or curved part to the front.

On other makes of power control units, where the cable is threaded from the fairlead sheave on the rear, these brackets may be reversed, using the left one on the right side, with the offset to the rear. If this is done the Rear Overhead Brace group must be bolted to the rear position on the Overhead Beam Group.

Install #50633 rear overhead brace assem. using the 2 #5190 capscrews provided. Refer to Parts Plate #1421, page 36.

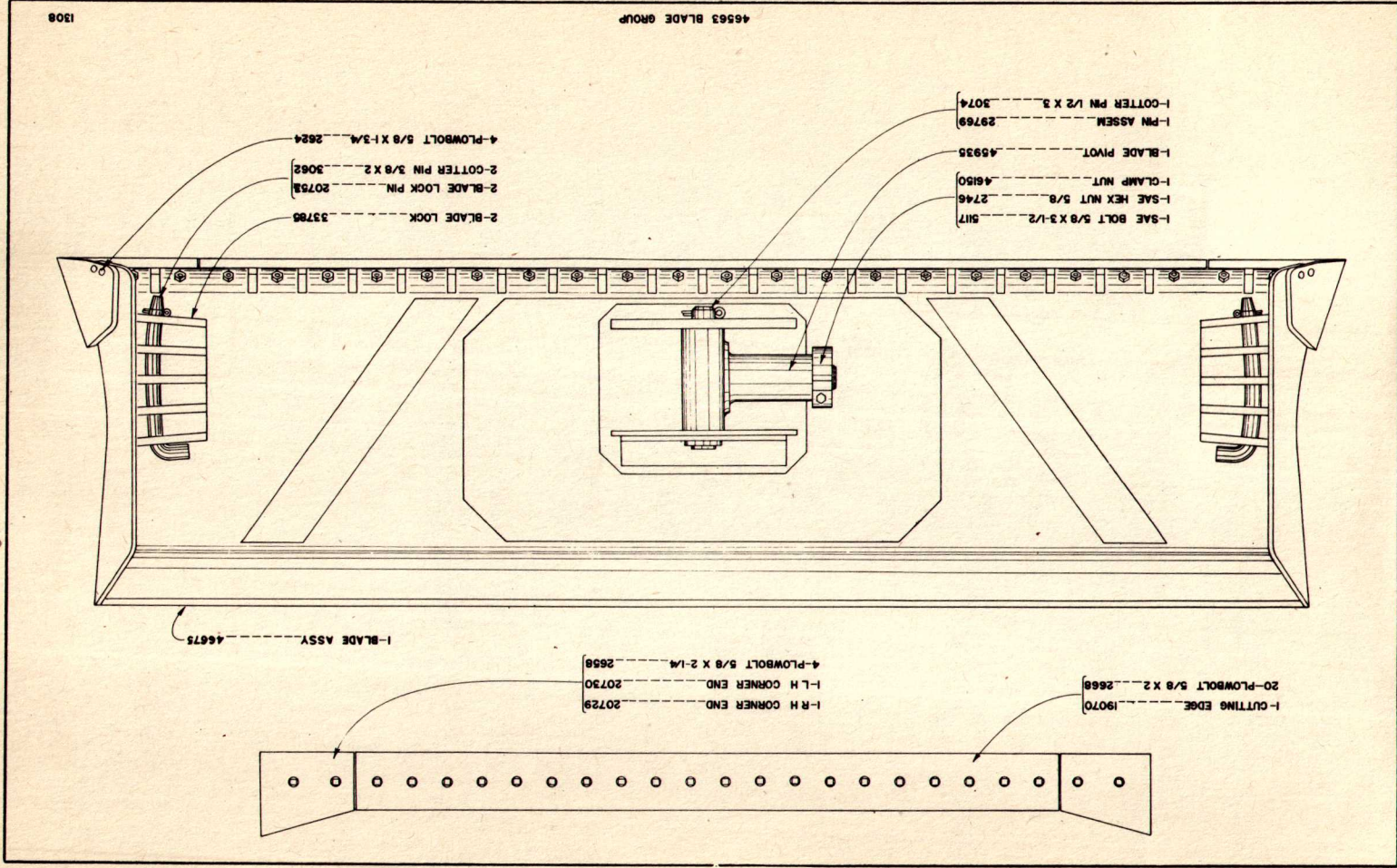
Install #50649 Overhead Beam Group using the 5 #5188 capscrews provided. Note: Bolt the rear overhead brace group to the overhead beam group in the farthest forward position possible if it is to be used with a Caterpillar power control unit. Other positions are for the purpose of using with other type power control units.

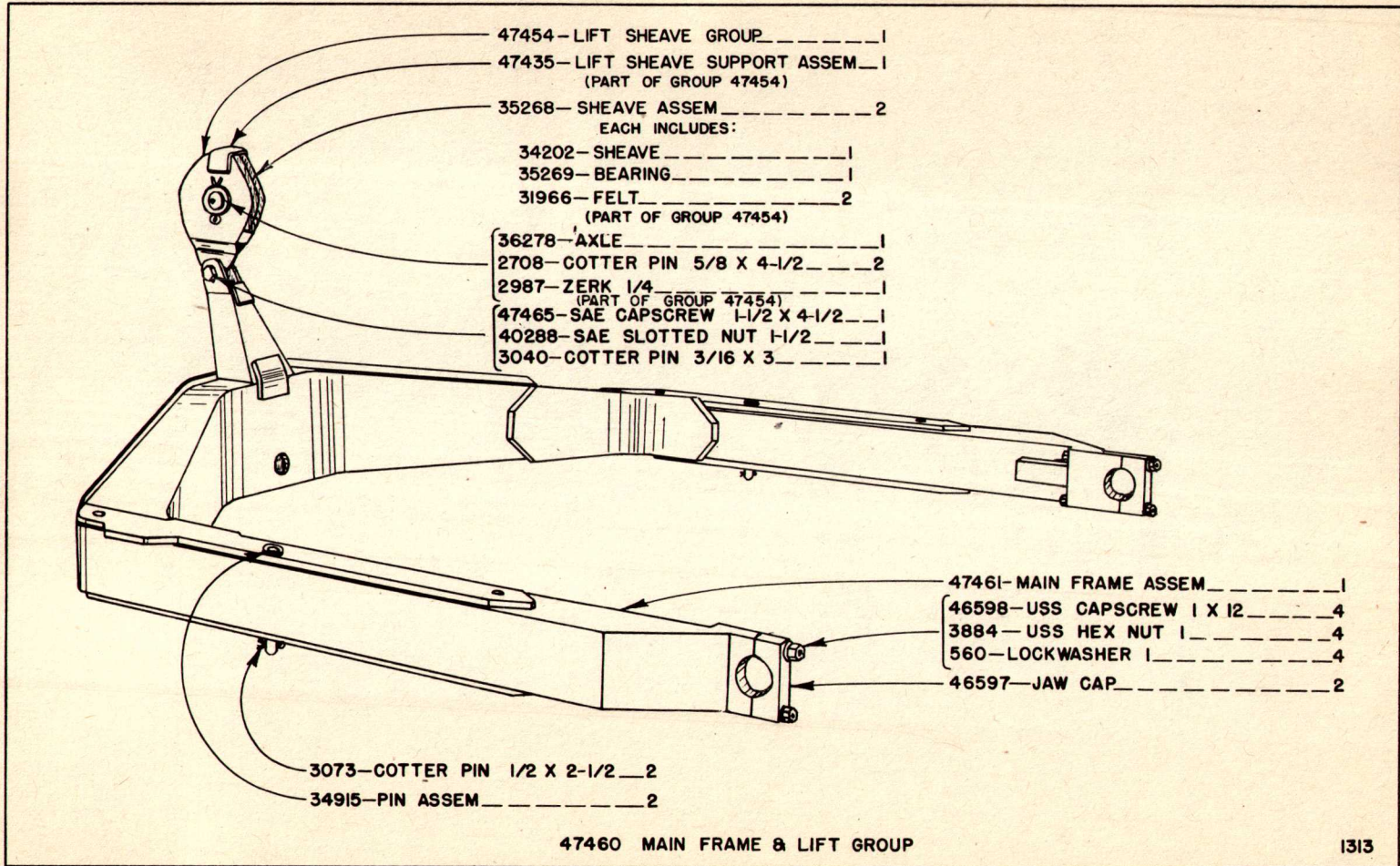
To install main frame, refer to parts plate #1313, page 30.

Remove #46597 Jaw Caps and drive tractor into frame. Reinstall caps over #46579 Pivot Bearing.

Install #29859 cable 1/2" - 6 x 19 wire rope in overhead and main frame sheave blocks as illustrated on parts plate #1422 on page 38. Be sure to dead-end the wire rope on left side of overhead beam group and after threading through the sheaves attach the other end to the power control unit drum.

Install #38162 push pole with blade angled to either side or in the straight bulldozing position as desired.





30

MAIN FRAME AND LIFT

R76R — 1 AND UP

1313

I-R.H. PUSH POLE ASSEMBLY__38238
I-L.H. PUSH POLE ASSEMBLY__38239

I-R.H. PUSH POLE JAW___38254
I-L.H. PUSH POLE JAW___38255

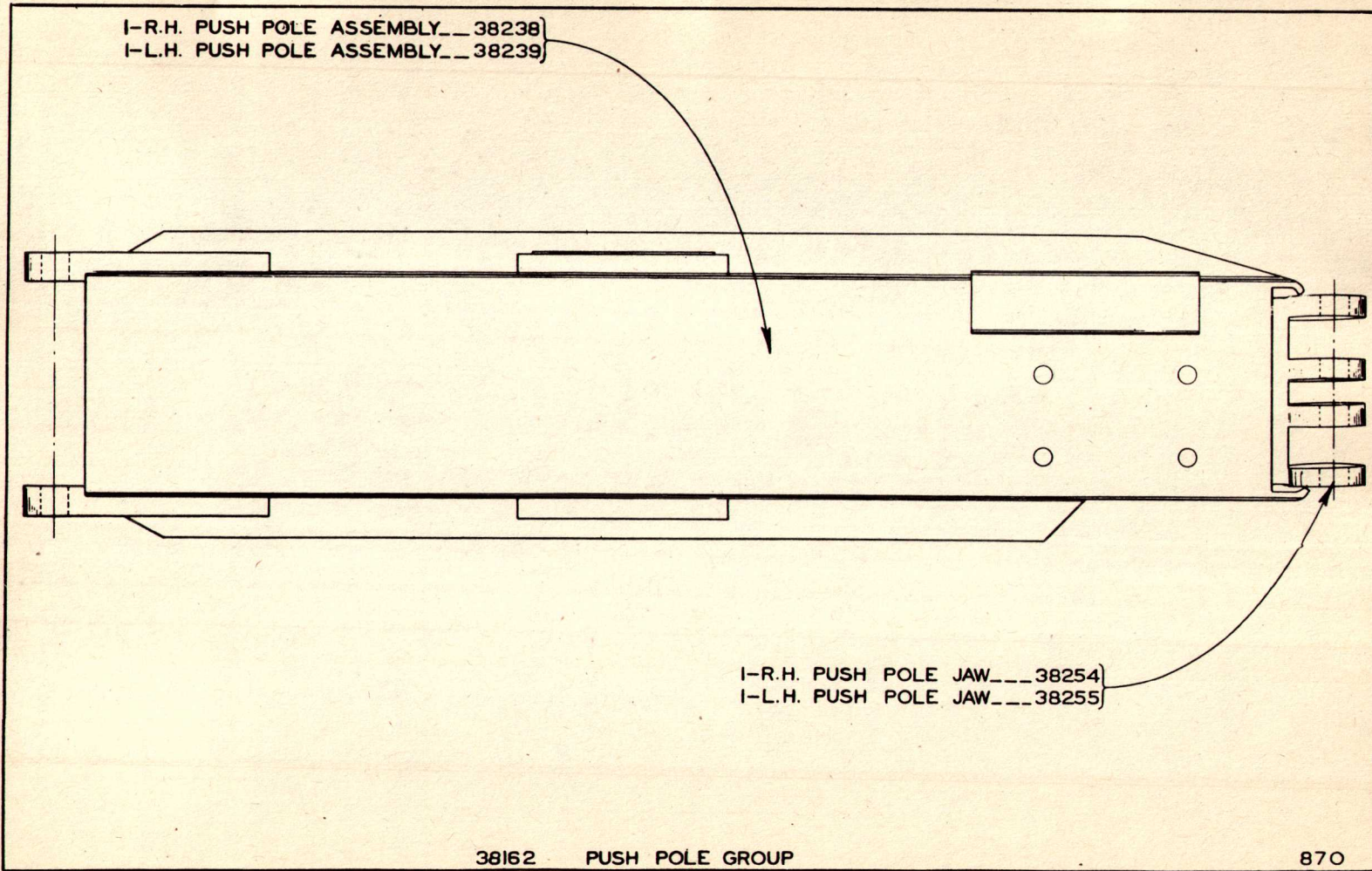
31

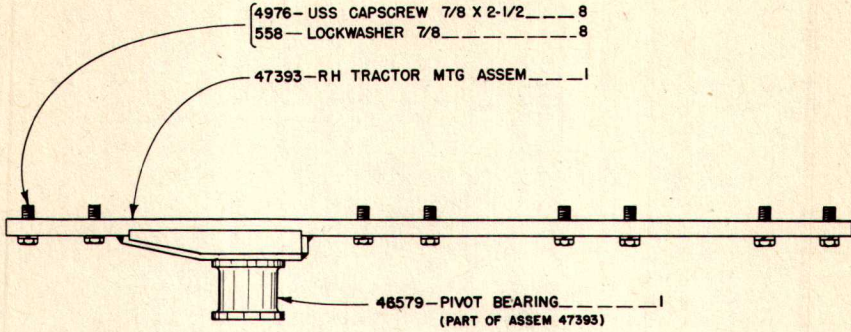
38162 PUSH POLE GROUP

870

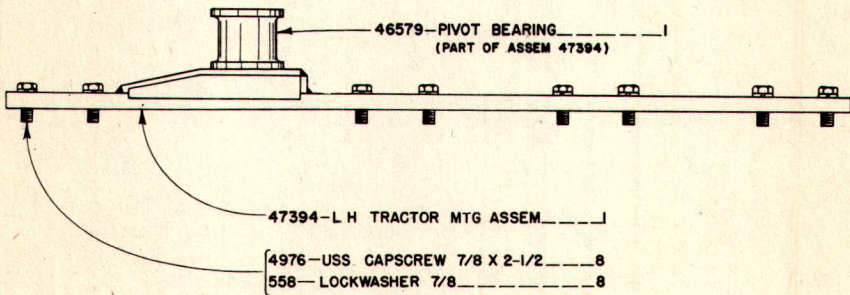
PUSH POLE

R76R — I AND UP





47398 RH TRACTOR MTG GROUP



47399 LH TRACTOR MTG GROUP

R76R — I AND UP

TRACTOR MOUNTING

- 2—SHEAVE ASSEM _____ 35268
- EACH ASSEM CONSISTS OF:
- 1—SHEAVE _____ 34202
- 1—BEARING _____ 35269
- 2—FELT _____ 31966

- 31756—WEDGE _____ 2
- 36278—AXLE _____ 1
- 2708—GOTTER PIN 5/8 X 4-1/2 _____ 2
- 2987—ZERK 1/4 _____ 1
- 5288—SAE CAPSCREW 1-1/4 X 3-1/4 _____ 2
- 2761—SAE HEX NUT 1-1/4 _____ 2
- 564—LOCKWASHER 1-1/4 _____ 2

- 1—RH OVERHEAD BRACE ASSEM _47437
- 1—LH OVERHEAD BRACE ASSEM _47438

- 47446—OVERHEAD ASSEM _____ 1

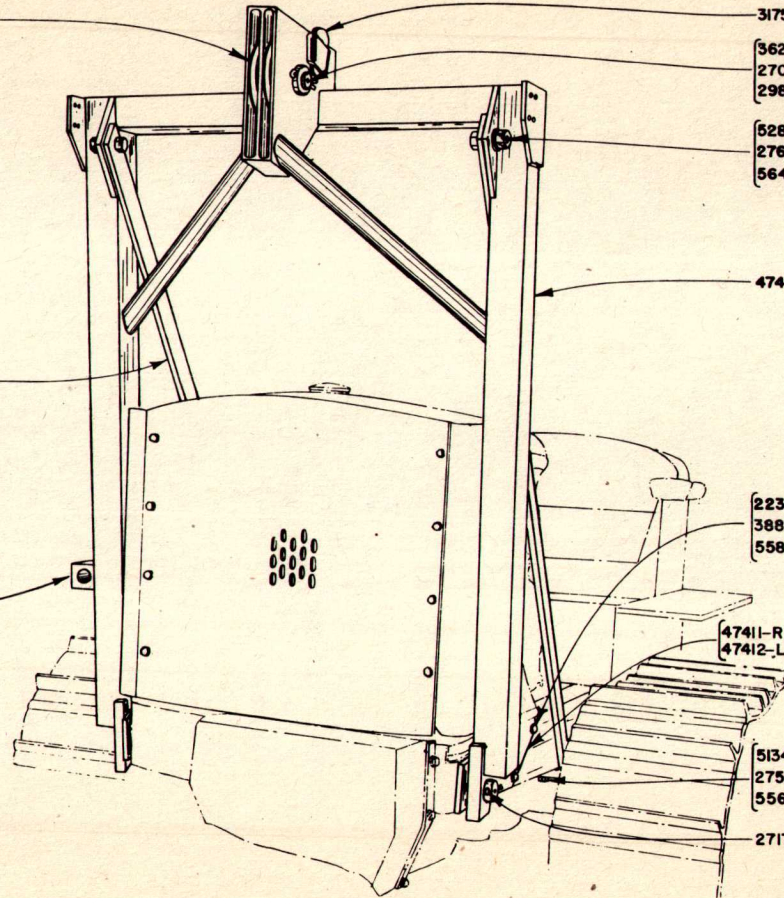
- 22315—USS CAPSCREW 7/8 X 3 _____ 10
- 3880—USS HEX NUT 7/8 _____ 10
- 558—LOCKWASHER 7/8 _____ 10

- 1—ZERK 1/8 _____ 6095
- (NOT SHOWN)

- 47411—RH OVERHEAD MTG PLATE ASSEM _1
- 47412—LH OVERHEAD MTG PLATE ASSEM _1

- 5134—SAE CAPSCREW 3/4 X 2-3/4 _____ 4
- 2750—SAE HEX NUT 3/4 _____ 4
- 556—LOCKWASHER 3/4 _____ 4

- 2717—GOTTER PIN 5/8 X 4 _____ 2



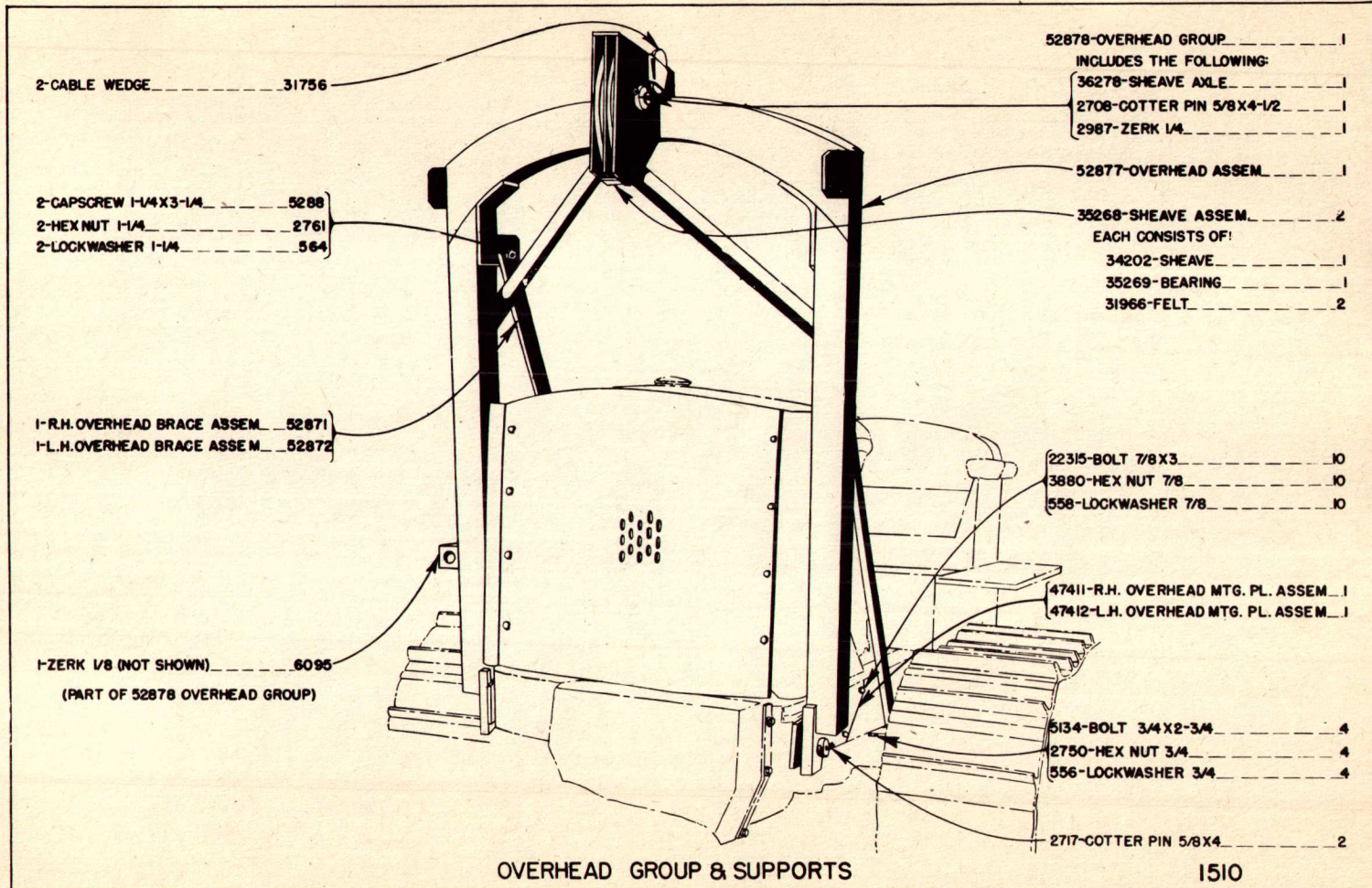
47447 OVERHEAD GROUP

1309

33

OVERHEAD

R76R — I TO 1199, INCL.

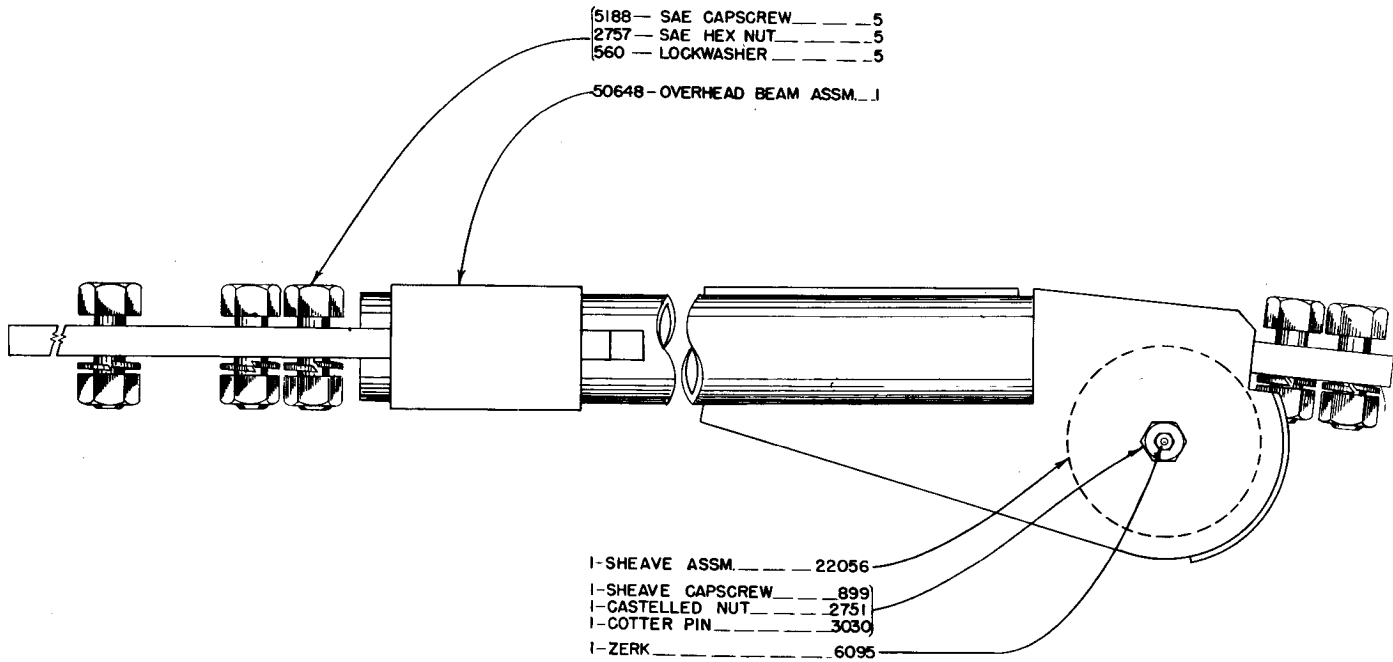


54

OVERHEAD

R76R — 1200 AND UP

36



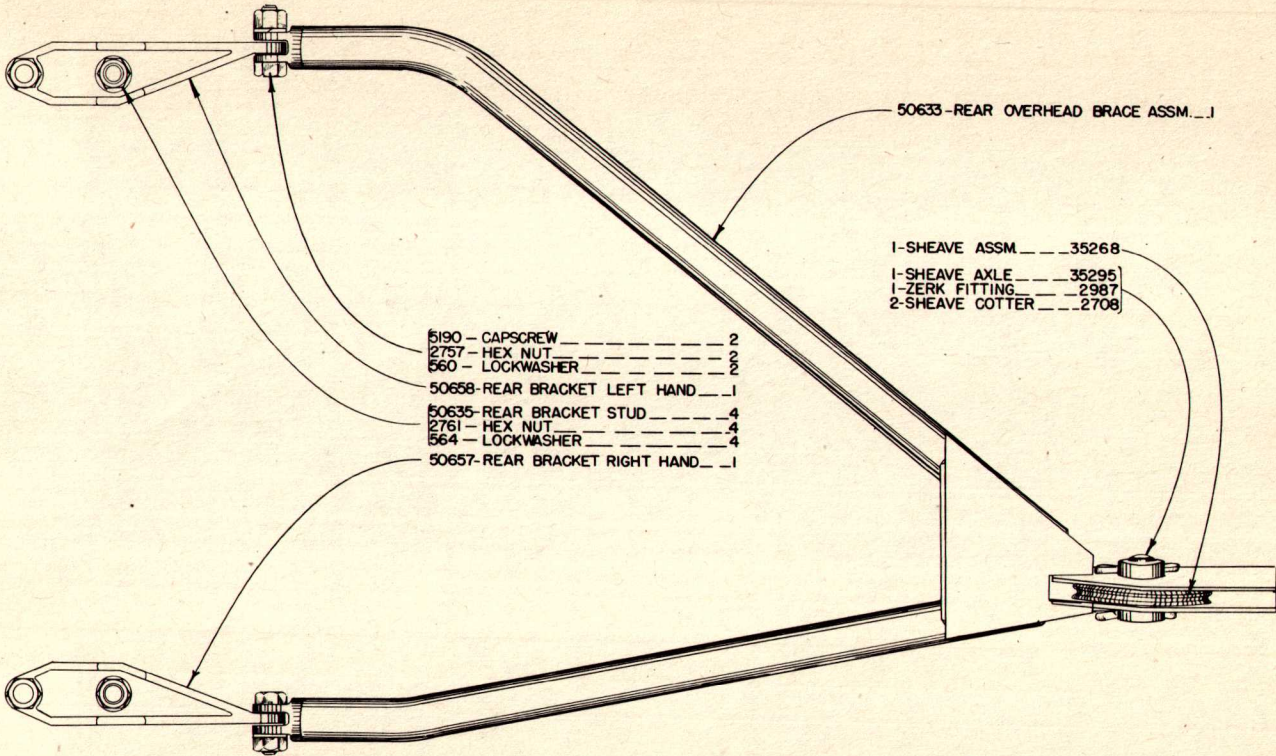
50649 OVERHEAD BEAM GROUP

1413

OVERHEAD BEAM

R76R — 1 AND UP

36

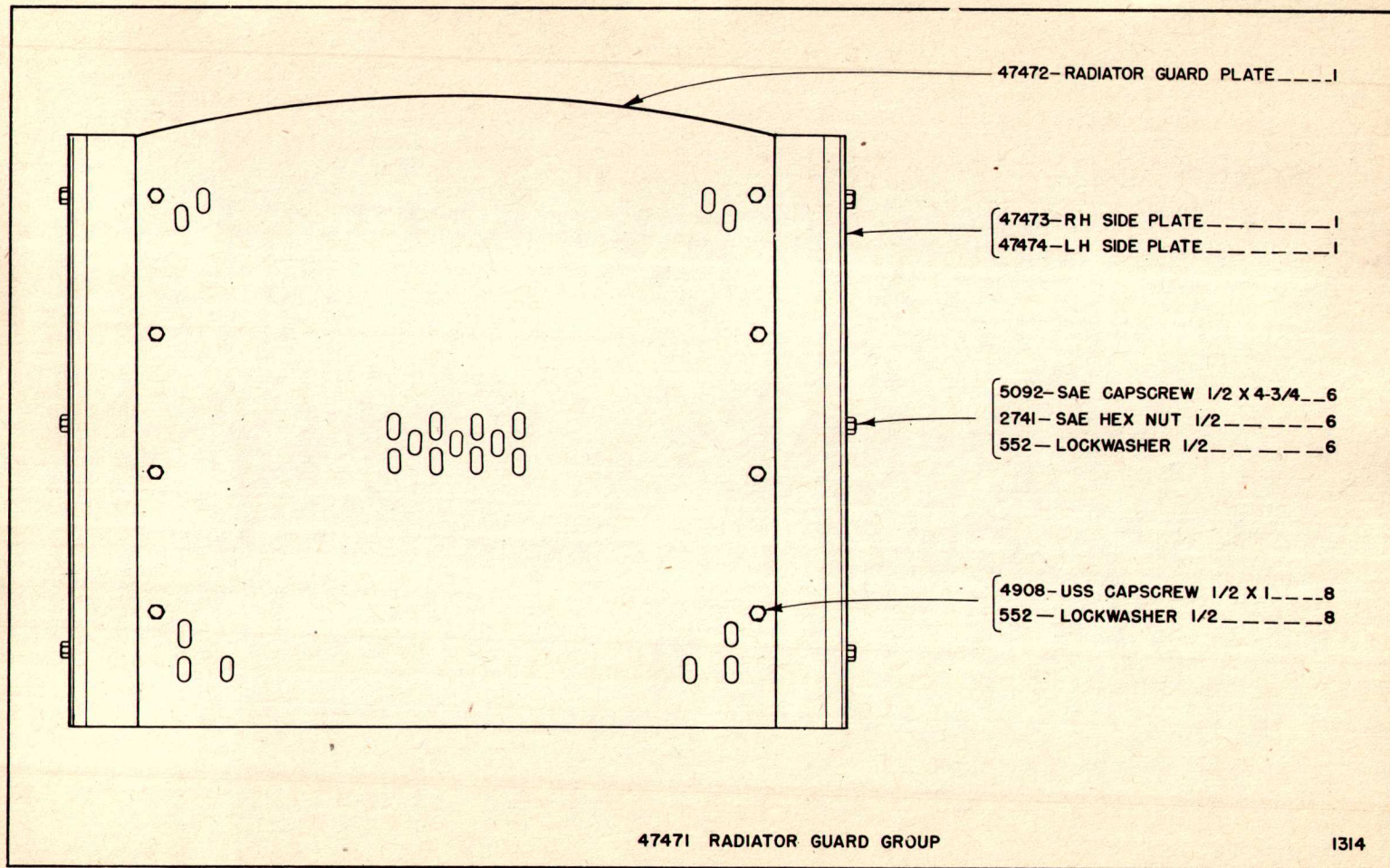


50655 REAR BRACE GROUP

1421

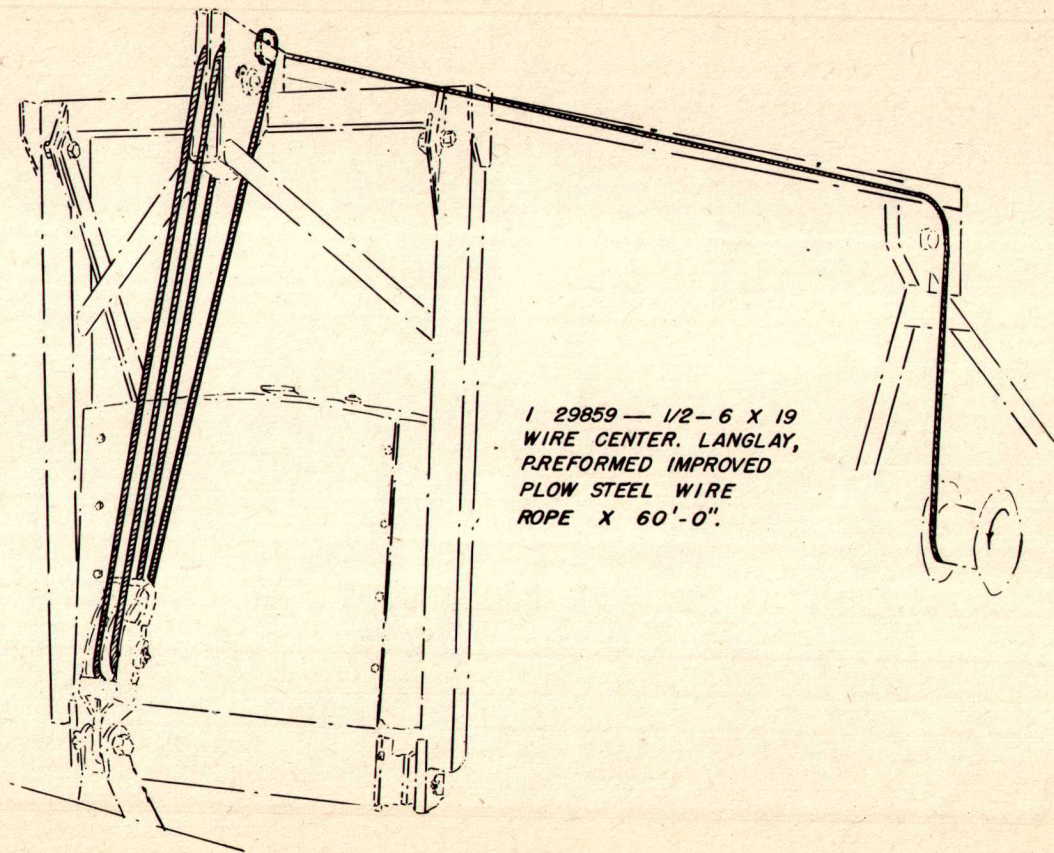
REAR BRACE

R76R — 1 AND UP



RADIATOR GUARD

R76R — I AND UP



1 29859 — 1/2-6 X 19
WIRE CENTER. LANGLAY,
REFORMED IMPROVED
PLOW STEEL WIRE
ROPE X 60'-0".

CABLE ARRANGEMENT

1422

38

CABLE ARRANGEMENT

R76R — 1 AND UP