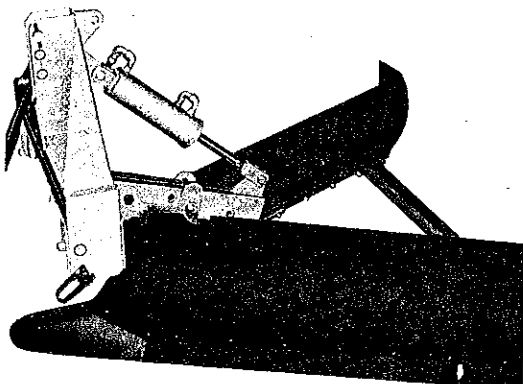


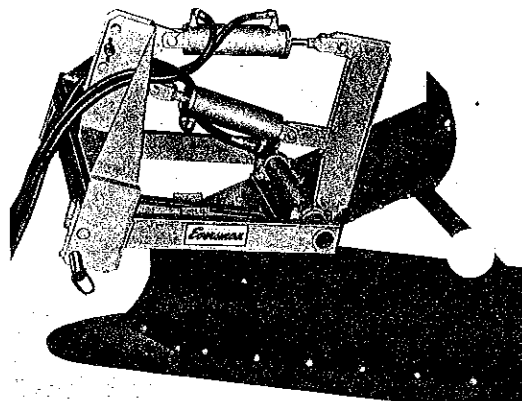


ASSEMBLY, PARTS LIST AND OPERATING INSTRUCTIONS

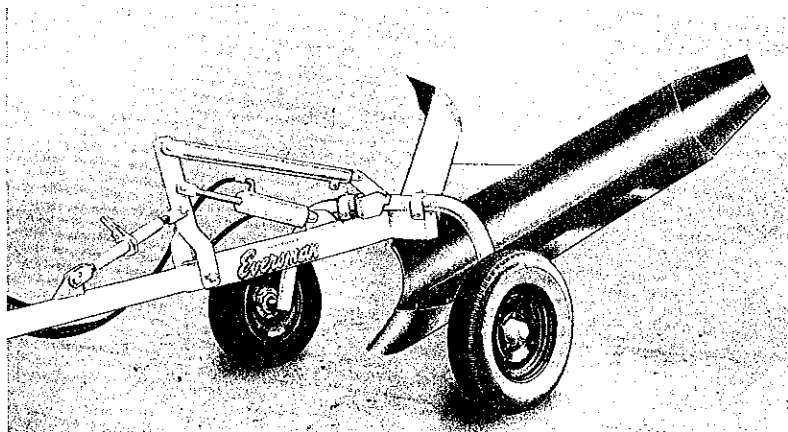
FOR EVERSMAN DITCHERS



REAR MOUNT MODELS
H5-1 - H5-3 - H-7



REAR MOUNT MODELS
H5-ER - H7-ER



RUBBER MOUNT MODELS
D-5 - D-7

Jan. 1977

The Eversman Ditcher line is comprised of seven models - five rear-tractor mounted and two rubber-tire mounted. The details of these models are as follows:

A - Model H5-1

This ditcher consists of a light-weight, inexpensive tripod (C-1) and a five foot wing assembly. It is for installation on Category 1, small horse power tractors, which are to be operated in first gear with the hydraulic system set on constant draft control. The Model H5-1 includes an adjustable top link assembly to regulate the pitch of the wings. It was primarily designed to construct small grain field laterals. The H5-1 should be used with 4 - wheel tractors since insufficient vertical adjustment is available to clean the bottom of a ditch if a tricycle tractor is utilized.

B - Model H5-3

This ditcher consists of a heavier tripod - the C-3S, and a five foot wing assembly. The C-3S tripod is designed to accommodate either Cat. 2 or Cat. 3 hitches, and is operated with a standard 8" stroke cylinder, or an optional heavy-duty adjustment screw (932060).

C - Model H7

This model uses the C-3S tripod, with a seven foot wing assembly.

D - Model H5-ER

This ditcher has the five foot wing assembly installed on the C-3ER tripod. The C-3ER is designated as "extended range" since it permits a much greater adjustment of ditch depth and width, and transport clearance. This tripod is installed on Category 2 or 3 hitches, and is operated with two 8" stroke cylinders, or one cylinder for the depth control, and a heavy-duty adjusting screw for the width, or angle adjustment.

E - Model H7-ER

This model utilizes the C-3ER tripod with the seven foot wing assembly.

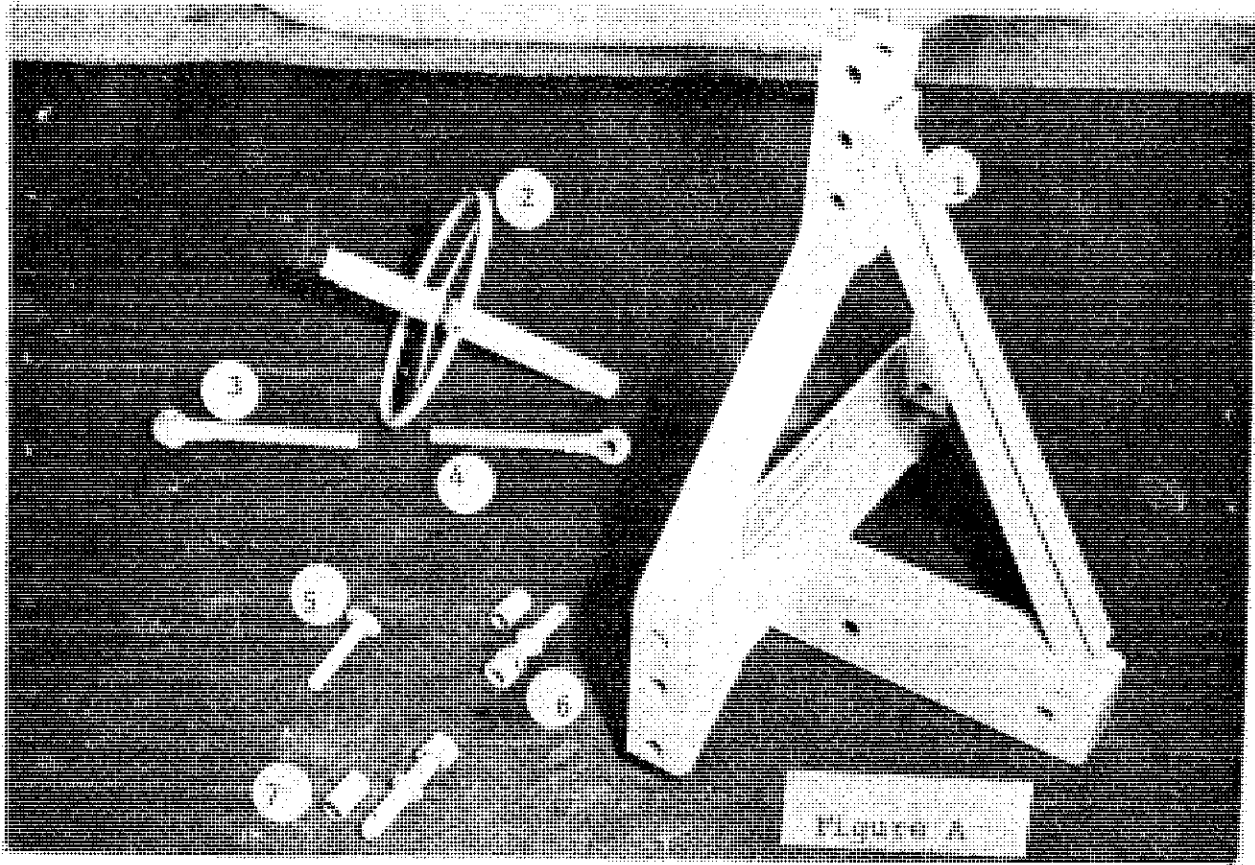
F - Model D-5

This is a pull-behind ditcher, mounted on rubber tires, and consists of a five foot wing and the carrier assembly. It operates with either 2 - 8" stroke cylinders, or a mechanical ratchet jack can be substituted for the front cylinder which regulates the shape, or width, of the ditch.

G - Model D-7

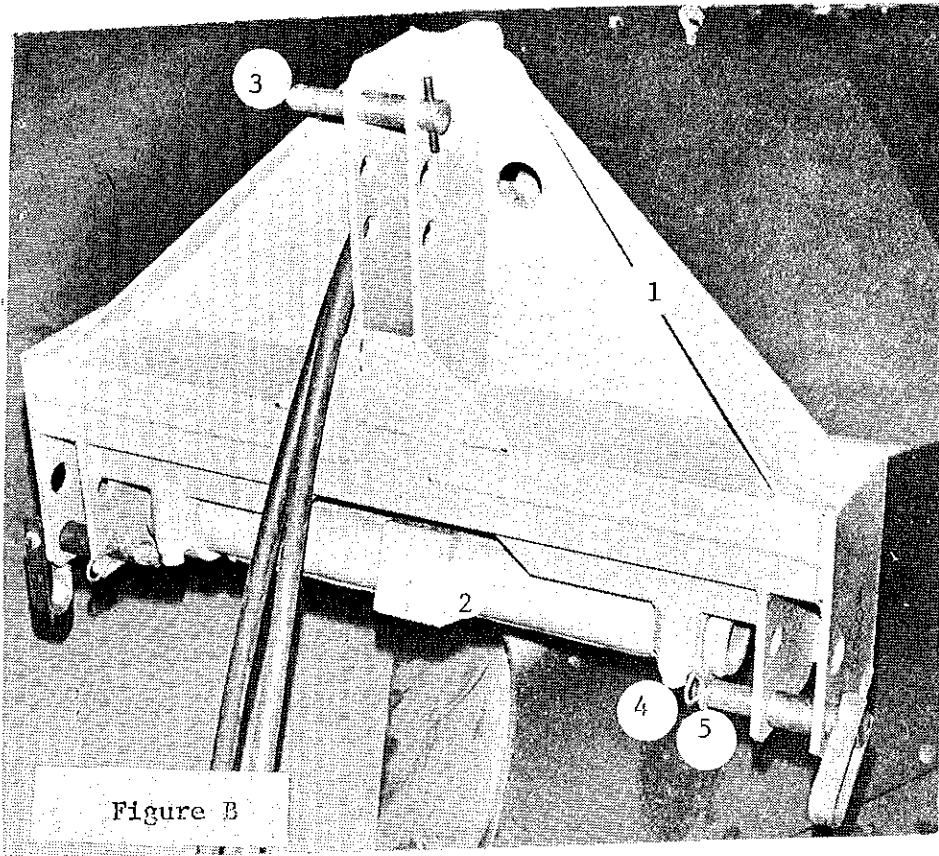
The Model D-7 is a pull-behind ditcher consisting of a seven foot wing and the pull-behind, rubber-mounted carrier assembly.

C-1 TRIPOD ASSEMBLY - 900014

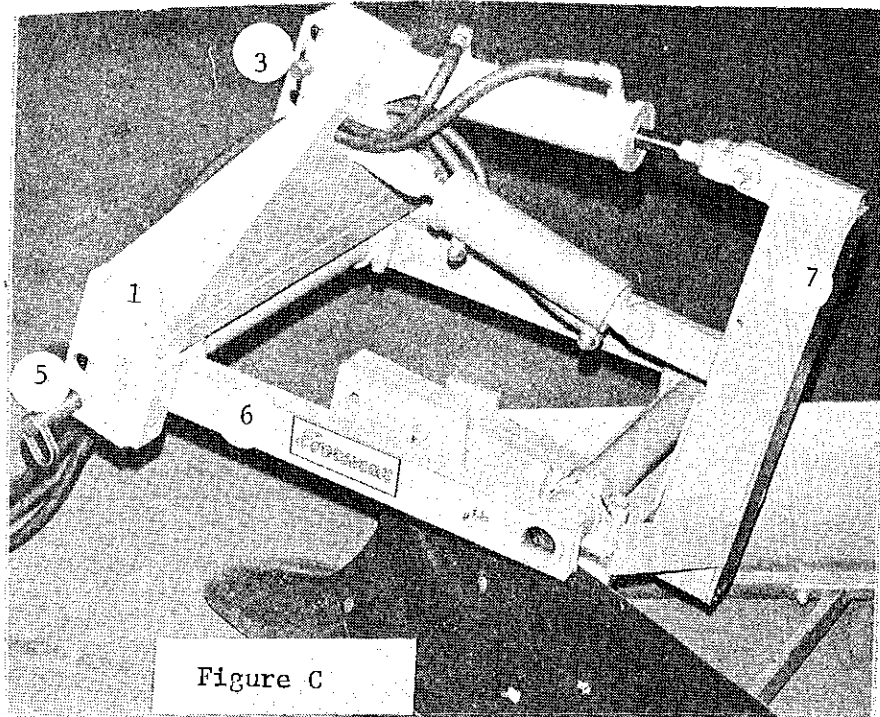


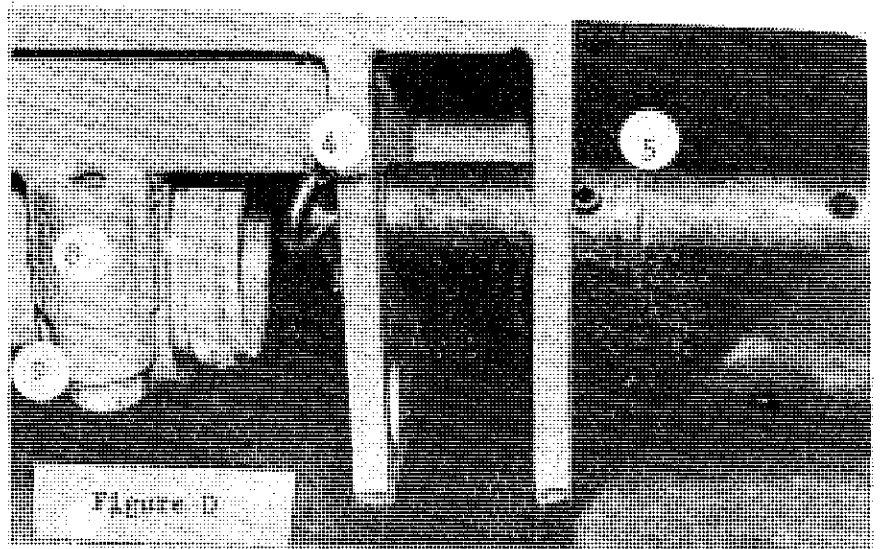
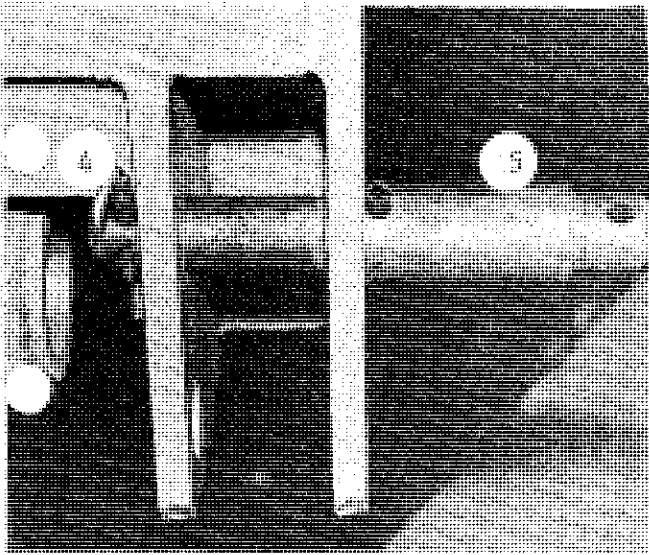
Ref. No.	Part No.	Description	Model No.	No. Req.
1	920200	Tripod Weldment	H5-1	1
-	920300	Top Link Assembly	"	1
2	920600	Handwheel	"	1
3	920500	L.H. Screw	"	1
4	920400	R.H. Screw	"	1
5	920239	3/4 X 4" Upper Pin	"	1
-	063839	Hairpin	"	1
6	921000	Lower Pin	"	2
-	063142	7/8" Lockwasher	"	2
-	061992	7/8" Hex Nut	"	2
7	922200	Cat. 2 Bushing (Optional)	"	2

C-3S TRIPOD ASSEMBLY - 932005



C-3ER TRIPOD ASSEMBLY - 932010





Category 2 Pin Assembly

Category 3 Pin Assembly

Fig. No.	Ref. No.	Part No.	Description	Tripod Assembly	No. Req.
B,C	1	932001	Hitch Weldment	C-3S, C-3ER	1
B	2	932023	Beam Weldment	C-3S	1
B,C	3	290425	Upper Hitch Pin Assembly	C-3S, C-3ER	1
-	-	290424	Cat. 2 and 3 Hitch Pin	C-3S, C-3ER	1
-	-	064443	3/8 X 2-1/4 Roll Pin	" "	1
B,C,D	4	290451	Hairpin Assembly	" "	3
-	-	063839	Hairpin	" "	3
-	-	064393	1/4 X 2-1/4 Roll Pin	" "	3
B,C,D	5	290450	Lower Hitch Pin Assembly	" "	2
		290449	Lower Hitch Pin	" "	2
		064443	3/8 X 2-1/4 Roll Pin	" "	2
C	6	932042	Link Weldment	C-3ER	1
C	7	932045	Frame Weldment	"	1
D	8	450587	Bearing Assembly (Includes Cap)	C-3S, C-3ER	2
D	9	450588	Bearing Cap	" "	2
-	-	055316	5/8 X 1-3/4 Hex Bolt	" "	4
-	-	063140	5/8 Lock Washer	" "	4

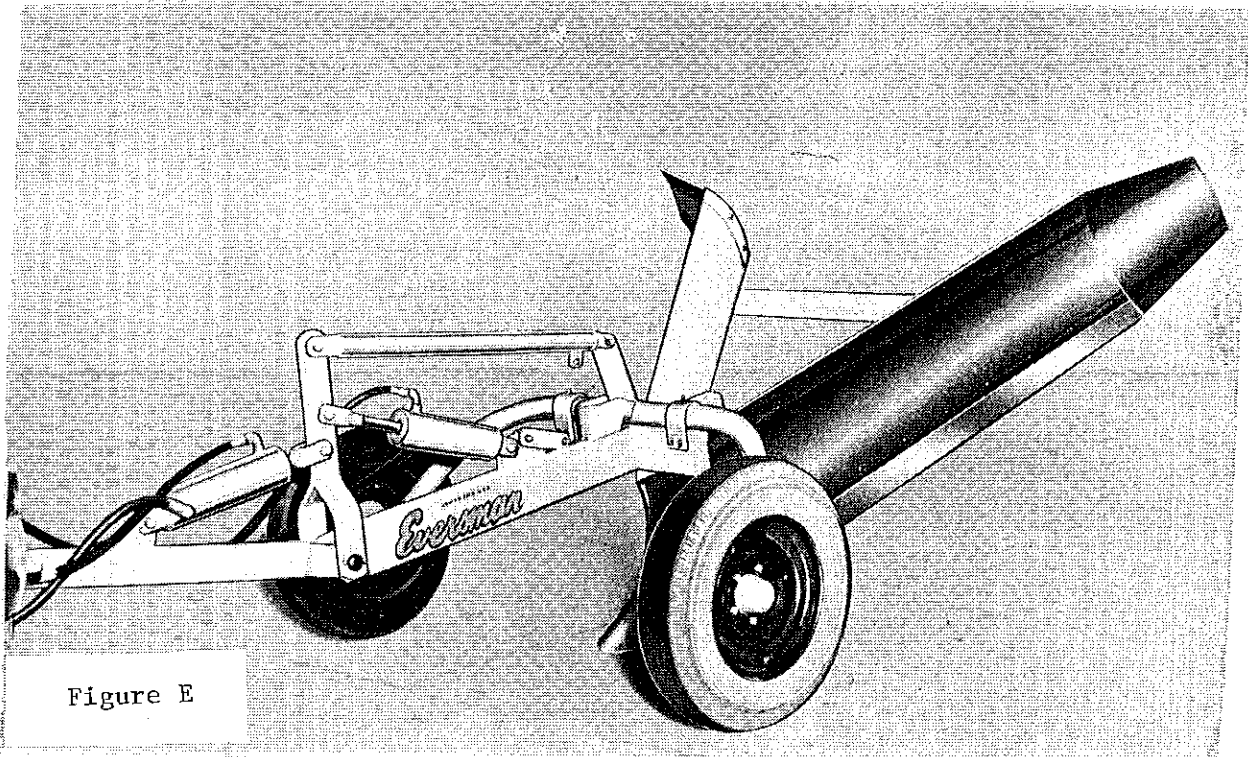
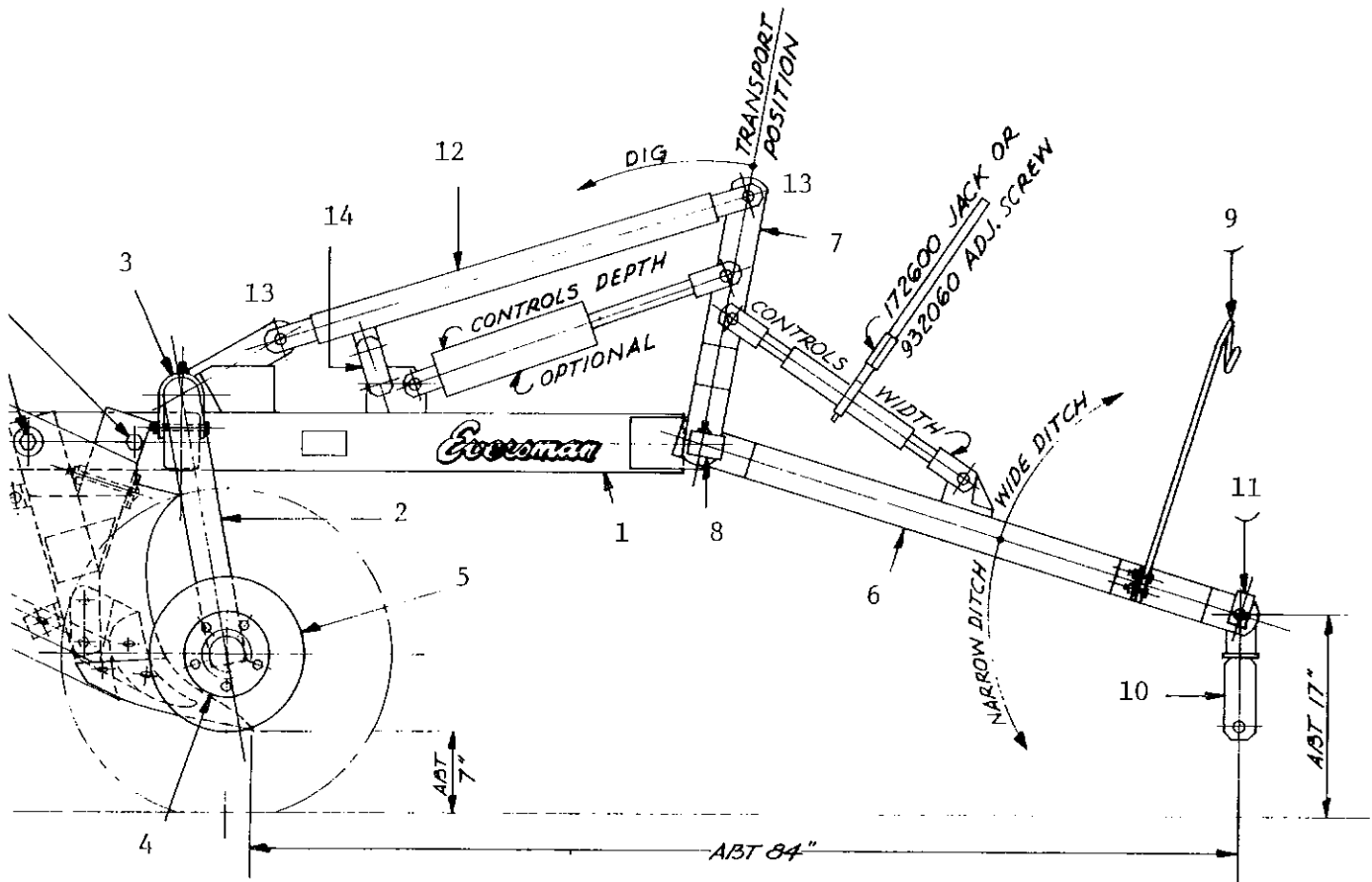
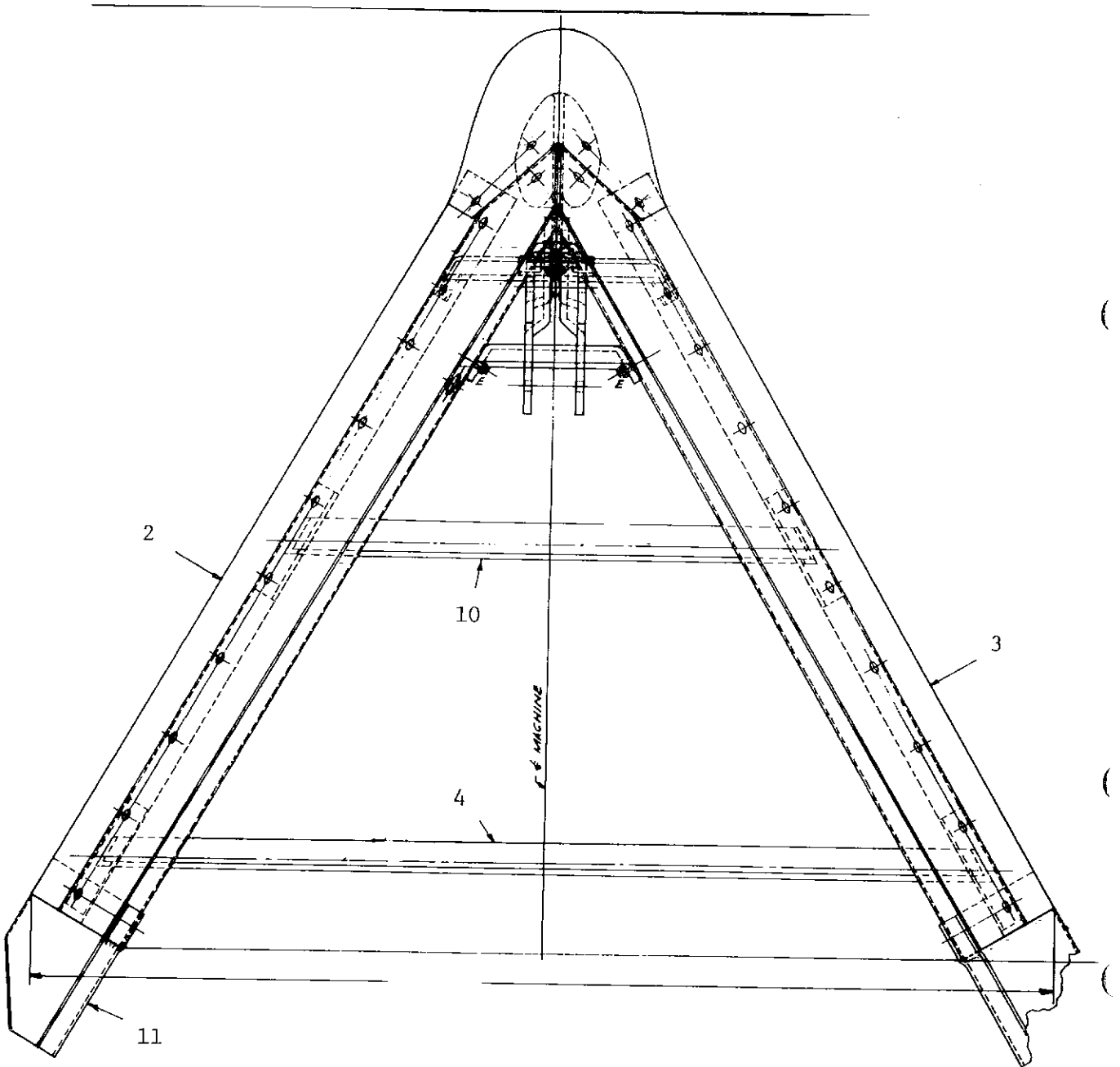
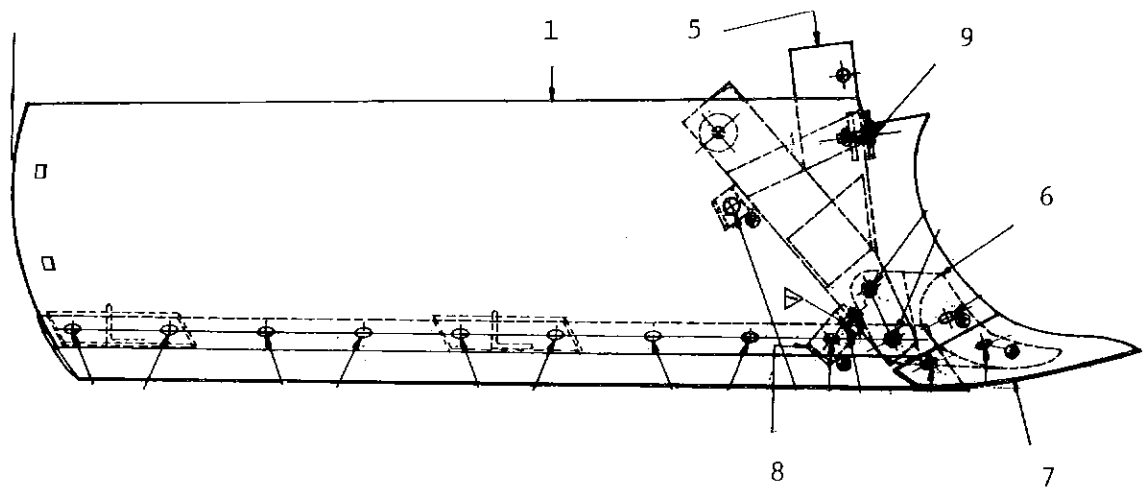


Figure E



CARRIER ASSEMBLY - 150011

Fig. No.	Ref. No.	Part No.	Description	Model No.	No. Req.
E	1	150020	Main Frame	D-5 & D-7	1
"	2	150310	Axle	" "	1
"	3	150580	Axle Clamp	" "	2
"	-	055238	1/2 X 4-1/2 Hex Bolt	" "	4
"	-	063538	1/2" Flat Washer	" "	4
"	-	063138	1/2" Lock Washer	" "	4
"	-	061938	1/2" Hex Nut	" "	4
"	4	023470	Hub Assembly	" "	2
"	-	031090	Hub Casting - With Sleeve	" "	1
"	-	062567	Spindle Nut	" "	1
"	-	030620	7/8" Washer	" "	1
"	-	006000	Grease Fitting	" "	1
"	-	007000	Lug Bolt	" "	5
"	-	023520	Hub Repair Kit	" "	1
"	-	023490	Triple Lip Seal	" "	1
"	-	023510	Wear Sleeve	" "	1
"	-	030801	Outer Bearing	" "	1
"	-	523501	Outer Cup	" "	1
"	-	031010	Hub Cap	" "	1
"	-	501336	Inner Bearing	" "	1
"	-	501337	Inner Cup	" "	1
"	5	590400	15" Wheel	" "	2
"	6	150351	Tongue Weldment	" "	1
"	7	151140	Lever Arm	" "	1
"	8	150500	Clevis Pin	" "	1
"	-	063778	5/16 X 2-1/2 Cotter	" "	1
"	9	012130	Hose Support	" "	1
"	10	023001	Swivel Clevis	" "	1
"	11	020260	Hitch Clevis Pin	" "	1
"	-	063764	1/4 X 2 Cotter	" "	1
"	12	151120	Lift Pipe	" "	1
"	13	701026	1 X 3 Clevis Pin	" "	2
"	-	063764	1/4 X 2 Cotter	" "	2
"	14	150660	Lock-Up Bar	" "	1
"	-	-----	Hyd. Kit (See Optional List)	" "	1or2
"	-	-----	Ratchet Jack (See Optional List)	" "	1
"	-	-----	Heavy Duty Screw (See Optional List)	" "	1

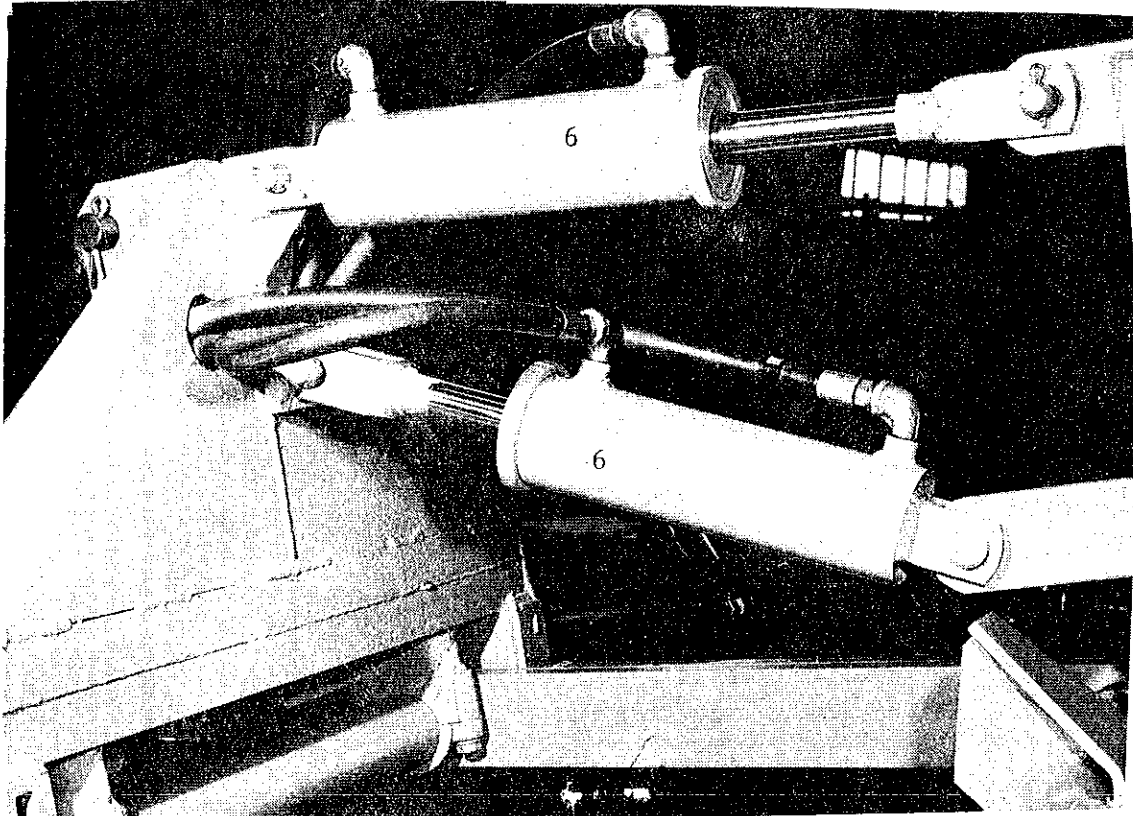
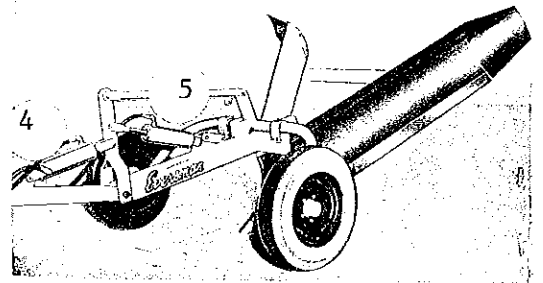
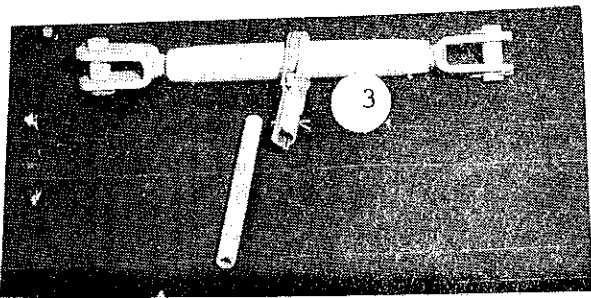
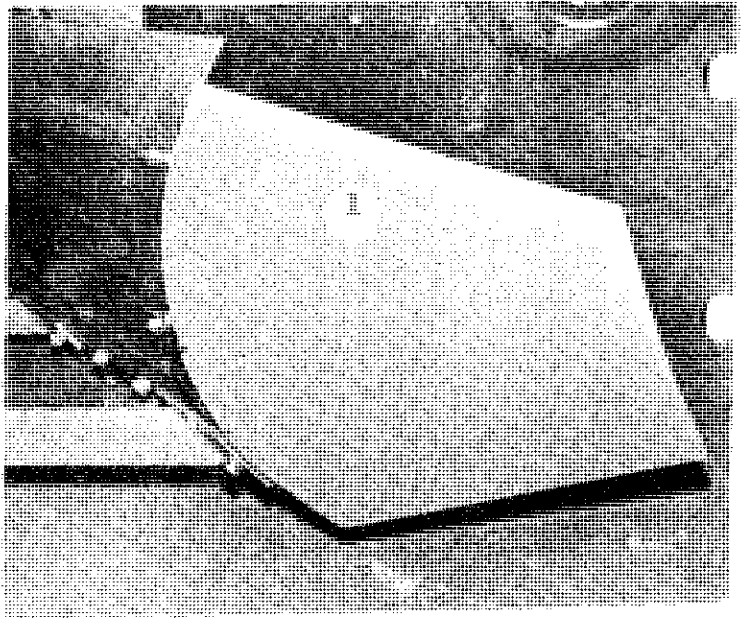
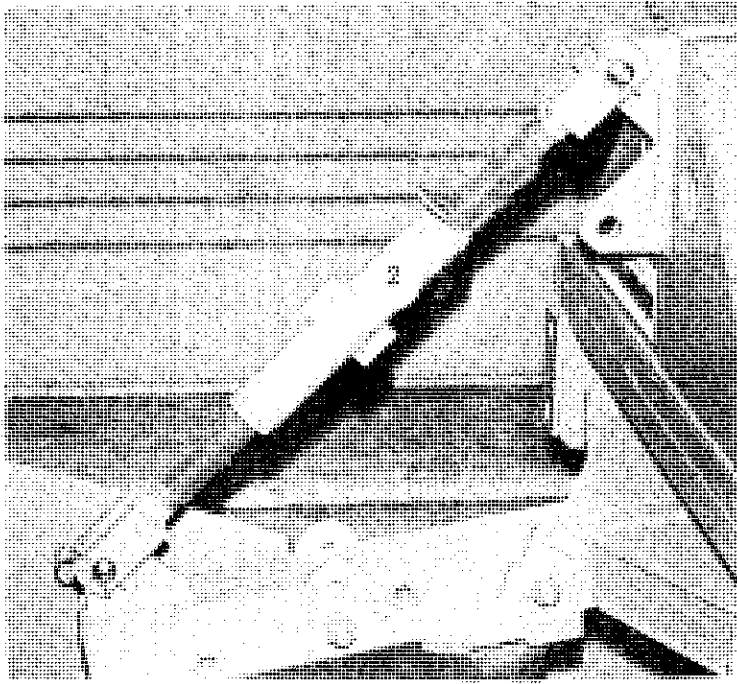


5' WING ASSEMBLY - 900605 AND 7' WING ASSEMBLY - 900607

Ref. No.	Part No.	Description	Wing Assembly	No. Req.
1	151258	5' Wing Weldment	5'	1
-	151251	L.H. Wing	"	1
-	151252	R.H. Wing	"	1
2	901200	L.H. Bit	"	1
3	901300	R.H. Bit	"	1
-	051212	1/2 X 1-1/4 Carriage Bolt	"	-
4	904200	Rear Wing Brace	"	1
1A	151257	7' Wing Weldment	7'	1
-	151253	L.H. Wing	"	1
-	151254	R.H. Wing	"	1
2A	151255	L.H. Bit	"	1
3A	151256	R.H. Bit	"	1
4A	904400	Rear Wing Brace	"	1
5	150701	Wing Shoe Weldment	5' & 7'	1
6	151190	Wing Share Weldment	"	1
7	906200	Duckbill Nose Share (Standard)	"	1
-	059778	1/2 X 1-3/4 Plow Bolt	"	4
-	902800	Narrow Nose Share (Optional)	"	1
8	150771	Lower Bracket	"	1
9	150900	Anchor Bar Weldment	"	1
10	901600	Middle Wing Brace	"	1
11	-----	Wing Extension (See Optional List)	"	-

Note: To install these wing assemblies on old C-2 tripods (900015) or old chassis assemblies (900010), order adaptor kit #901810.

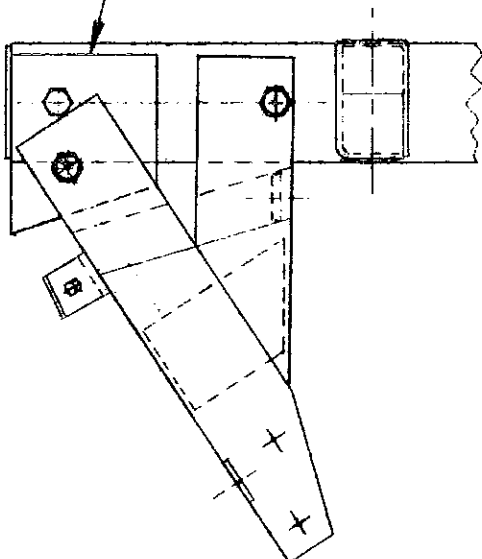
OPTIONAL EQUIPMENT



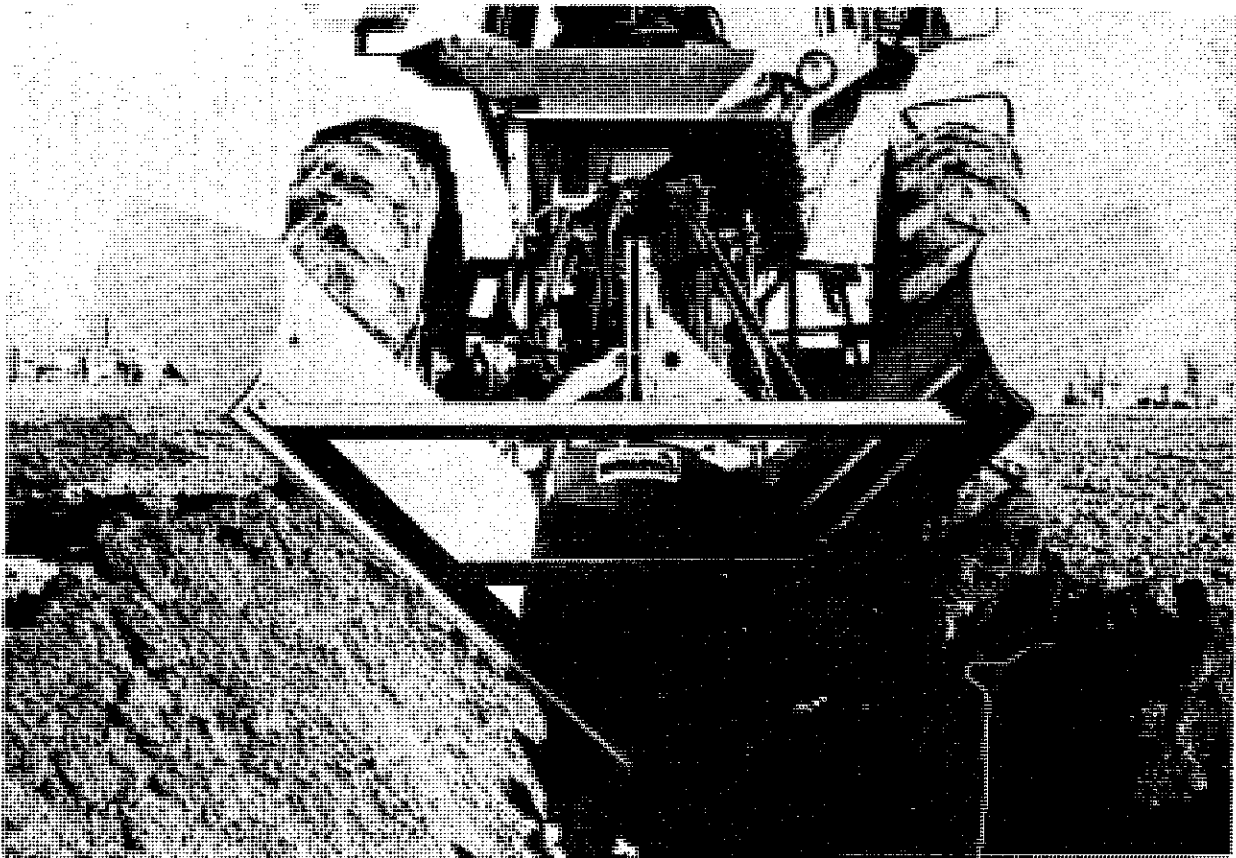
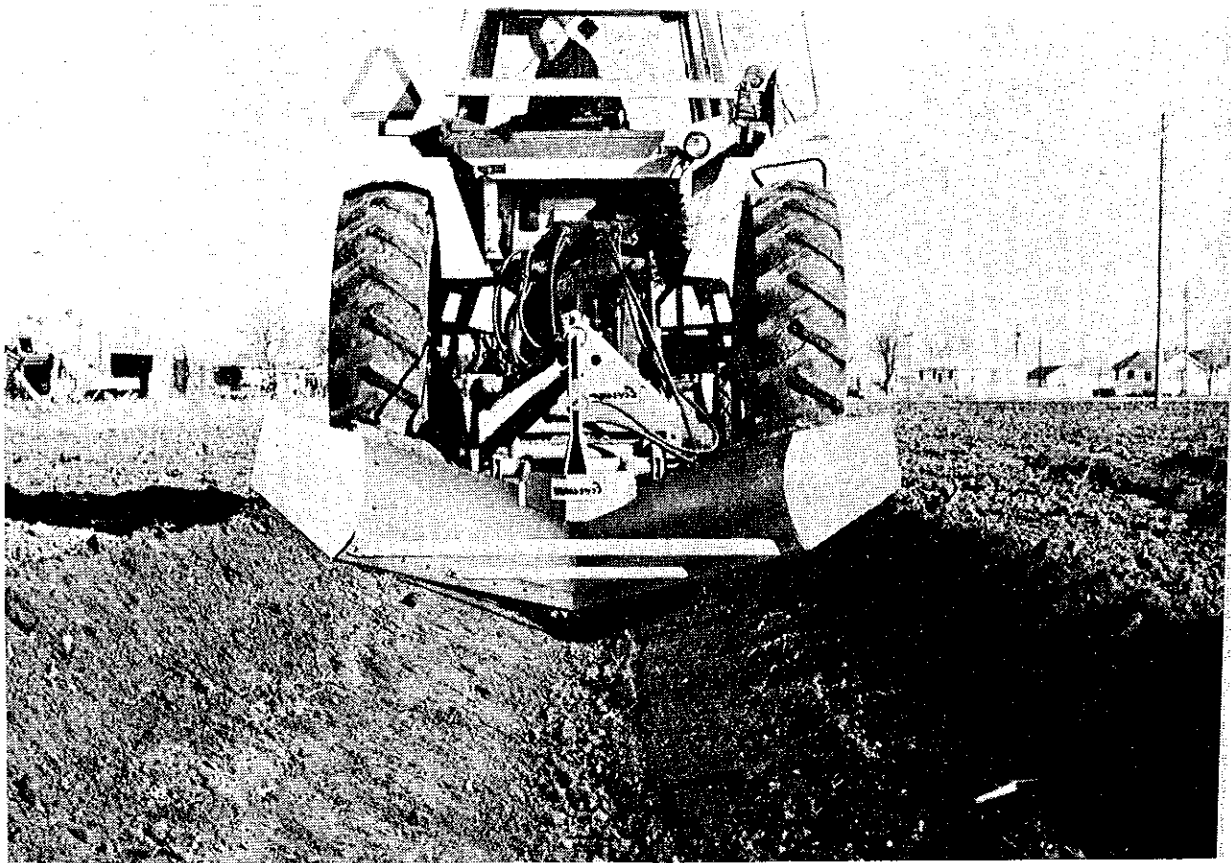
OPTIONAL EQUIPMENT

Ref. No.	Part No.	Description	Use For	No. Req.
1	151160	Wing Extension Kit	5' or 7' Wing	1
-	151010	L.H. Wing	" "	1
-	151020	R.H. Wing	" "	1
2	932060	Heavy Duty Adjusting Screw-Width Control	ER Models	1
-	932061	Pipe	"	1
-	932065	L.H. Screw	"	1
-	932066	R.H. Screw	"	1
-	932070	Clevis Pin	"	2
-	063839	Hairpin	"	2
-	932064	Special Locking Nut	"	1
3	172600	Ratchet Jack - Width Control	D5 & D7	1
-	155197	L.H. Screw	" "	1
-	155196	R.H. Screw	" "	1
-	155194	Pipe	" "	1
-	155195	Handle	" "	1
-	701026	Clevis Pin	" "	2
-	063764	1/4 X 2 Cotter	" "	2
4	261500	Hydraulic Kit - Width Control	D5 & D7	1
-	311021	8" Stroke Cylinder	" "	1
-	405800	1/2 X 96" Hose	" "	2
-	701026	Clevis Pin	" "	2
-	063762	1/4 X 1-1/2 Cotter	" "	2
5	151200	Hydraulic Kit - Depth Control	D5 & D7	1
		Same as 261500 Kit Except for Hoses		
	150340	1/2 X 120" Hose	" "	2
6	932085	Hydraulic Kit - Width or Depth Control	ER Models	1 or 2
		Same as 261500 Except for Hoses		
	441020	1/2 X 72" Hose	" "	2

901810 KIT, WINGSHOE ADAPTOR
W'MENT, WING ADAPTOR
901806



To install the new 5' or 7' wing assemblies on old tripod and trail-behind ditcher models which were shipped with wings containing the 903000 cast wing shoe, kit number 901810 must be ordered.



FIELD OPERATION AND ADJUSTMENT

For both tractor-mounted and rubber-tire-mounted ditchers, the hitch must be free to float, so any sway blocks or chains should be removed.

Varying soil conditions, tractor sizes and individual grower specifications for constructing, or cleaning ditches make it almost impossible to establish any standard procedure for adjusting and operating Eversman ditchers. All models have sufficient adjustments and controls available to regulate the depth and shape (width) of channel desired. This then merely becomes a matter of the operator experimenting with the controls until he obtains the ditch he wants.

In general, the operator should first establish the shape of the ditch by using the control to pitch the wing to the desired angle. Then he can develop the depth of the ditch as soil conditions and the power available permit. Several passes are normally required, which will result in a firm, well-packed ditch bank, less subject to washing away.

A duckbill nose share (906200) is shipped as standard on all ditcher models since this will penetrate most soils and produce a flat-bottom ditch. For extremely difficult soils, a narrow, or pointed, nose share (902800) is available at the same price.

The H5-1 is the only model which is shipped with a mechanical screw control, which is used to change the shape (width) of the ditch.

Three sets of holes at the top and bottom of the C-1 tripod, combined with the adjustment available with the screw control, will permit a wide variety of channel depths and widths. The H5-1 should be used only with Cat. 1, 4-wheel tractors, operated in first gear, and with the hydraulic system set on constant draft control.

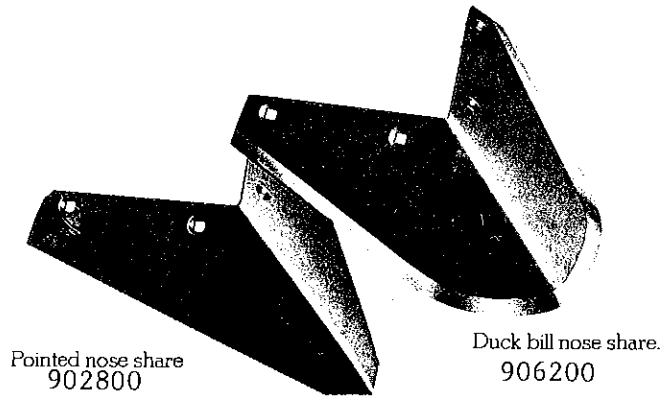
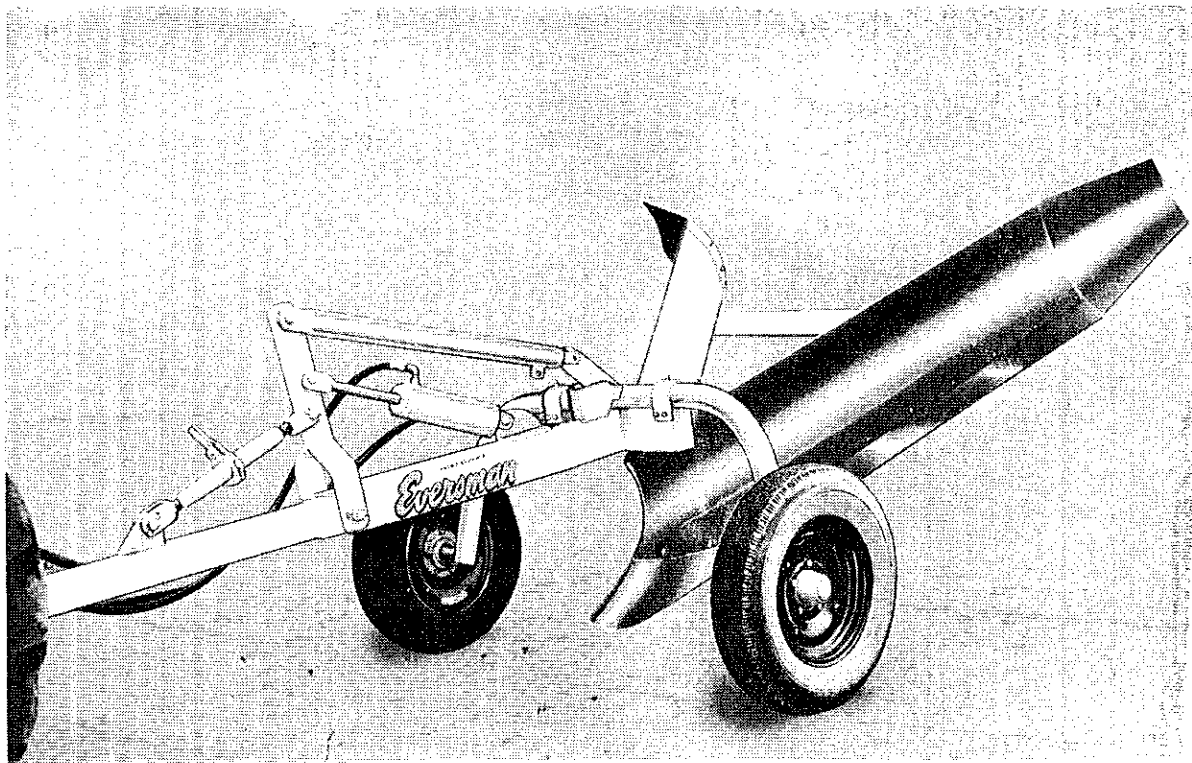
The H5-3 and H-7 models can be operated with any standard, ASAE, 8" stroke cylinder. If a mechanical control is used, the heavy-duty screw control, 932060, is recommended since the strength of the ratchet jack is marginal. Three holes are available, at the top of the C-3S hitch to connect the regular tractor top link at whatever angle is desired, and a choice of two holes for the lower draft arms connection permits further depth adjustment (refer Fig. B, page 3). Step pins at the top and bottom are designed to accommodate either Cat. 2 or 3 hitches.

The Model H5-ER and H7-ER are designed for installation on either Cat. 2 or 3 hitches, and are shipped without controls. The tripod is designated as "Extended Range" since it permits a much greater adjustment of channel shape and transport clearance than the C-3S. Note photos on pages 15 and 16 which show the range of adjustments.

The fast, easy method to operate the ER model is with two 8" stroke hydraulic cylinders and two tractor control valves. If only one tractor control valve is available, the top cylinder can be replaced with the heavy-duty screw (932060). This cylinder, or screw, regulates the shape, or angle, of the ditch. It is not practical to utilize a mechanical control for the bottom cylinder, which controls the channel depth, since this requires frequent changes during field operations.

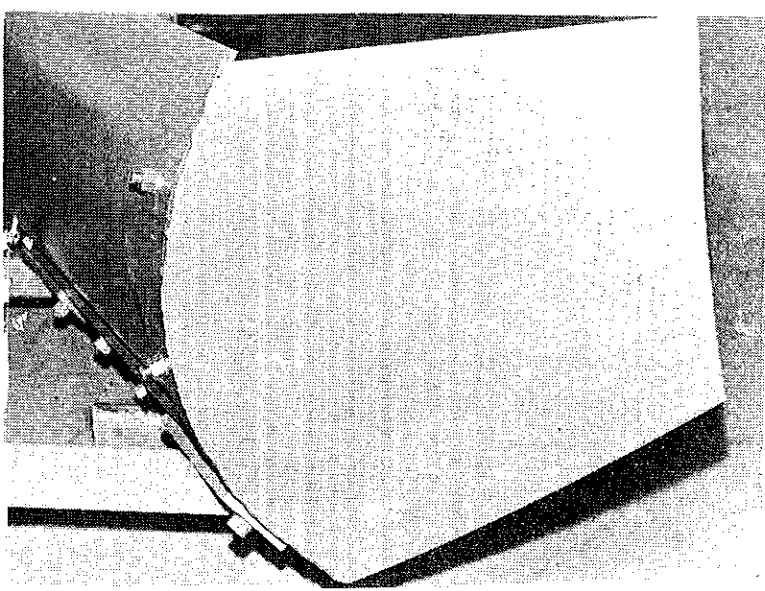
IMPORTANT - The Eversman cylinders (Kit No. 932085) must be installed exactly as shown in the bottom photo on page 9. Note that the elbow on the top end of the lower cylinder is installed at 90° to permit sufficient clearance with the top cylinder barrel. If connected at any other angle, these elbows will be knocked off. If other makes of cylinders are used on the ER tripod, a careful check of interference should be made by operating slowly through the full strokes of both cylinders.

Page 11 shows a range of channel sizes and shapes possible to construct with the "ER" ditchers.

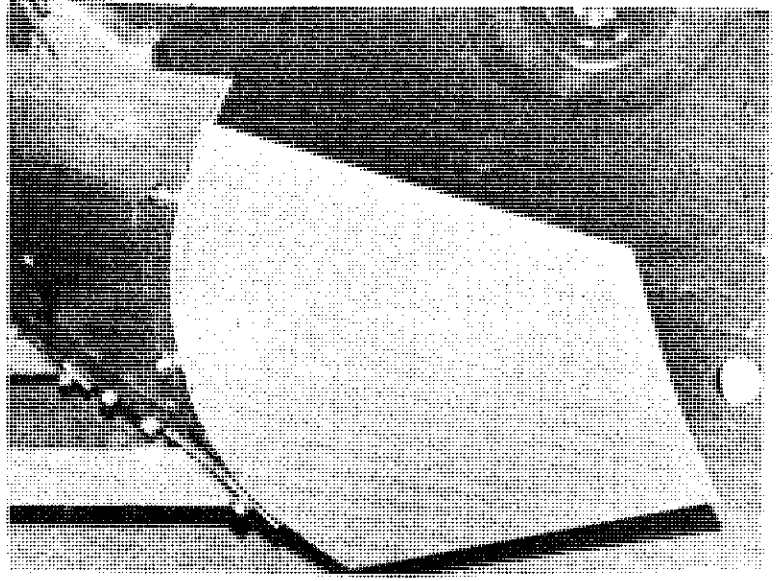


Pointed nose share
902800

Duck bill nose share.
906200



Wing extension tilted up to widen bank for irrigation ditch.



Wing extension flattened to erase bank for drainage ditch.

FIELD OPERATION AND ADJUSTMENT (Cont'd)

The Model D-5 and D-7 are shipped without controls and with 15" wheels, less tires. Any used automotive 15" tires can be installed. These ditchers can be operated with two standard, 8" stroke, ASAE, cylinders. Two tractor control valves are required.

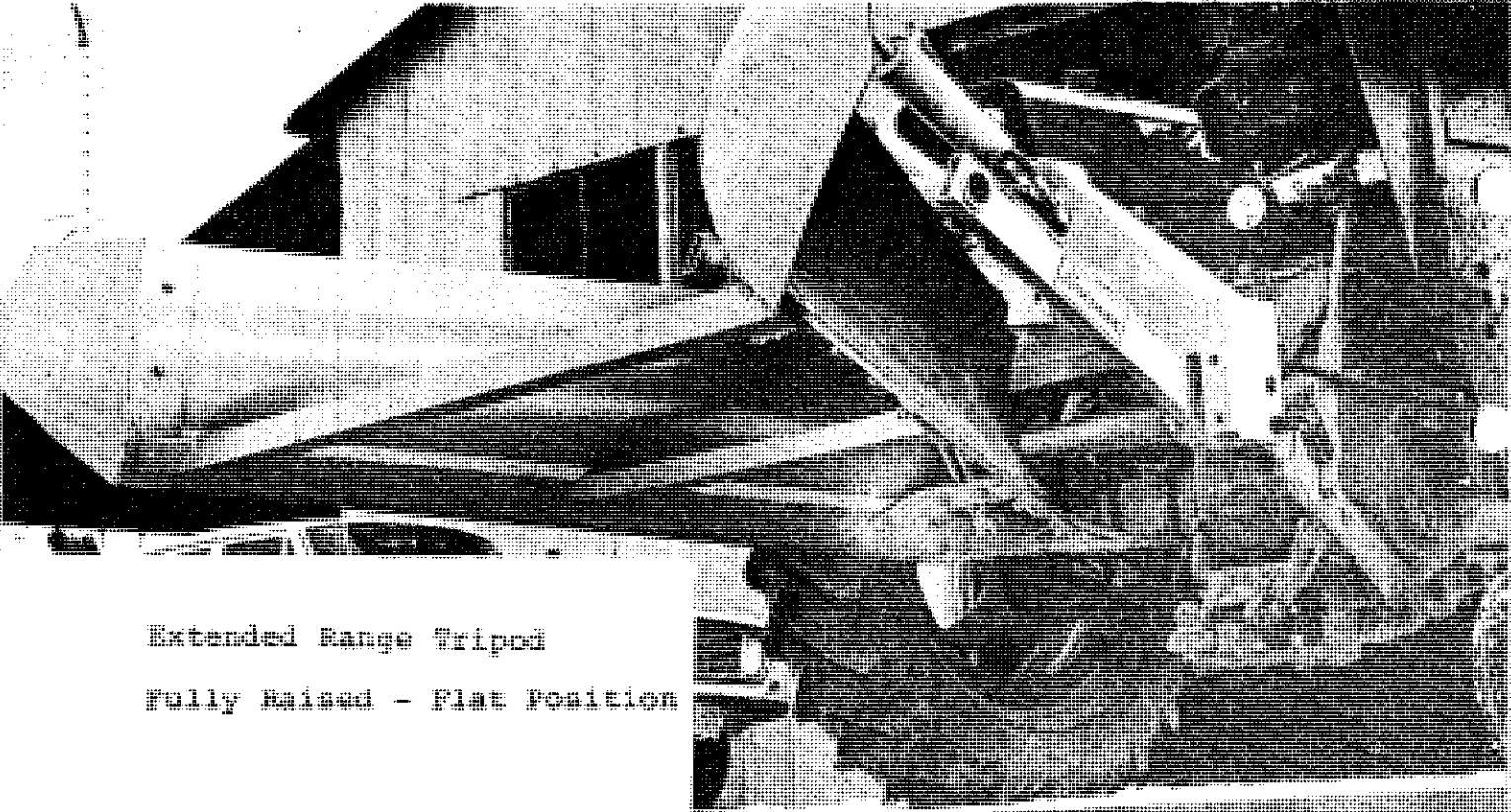
It is recommended that a cylinder always be used for the rear control since this regulates the depth of the ditch which is a frequent adjustment when either constructing new ditches or cleaning old ones. Normally, the front control is set and not changed as often. This control regulates the shape, and width of the channel by changing the angle of the wing, and the adjustment can be done mechanically with a ratchet jack (172600), or the heavy-duty adjusting screw (932060). In this case only one tractor control valve is required.

By means of an overhead lift pipe, and a two-section main beam structure, the D-5 and D-7 chassis always remains substantially parallel to the ground, and when pulled out of a ditch, the nose share will not disturb the ditch bank.

To assemble the D-5 or D-7, first attach the axle to the rear of the main beam with the two axle clips, and the tongue and lever arm to the front with the clevis pin. Then, after installing the lift pipe, the front and rear controls can be attached, the tires mounted, and the chassis assembly lifted to permit mounting the wing assembly.

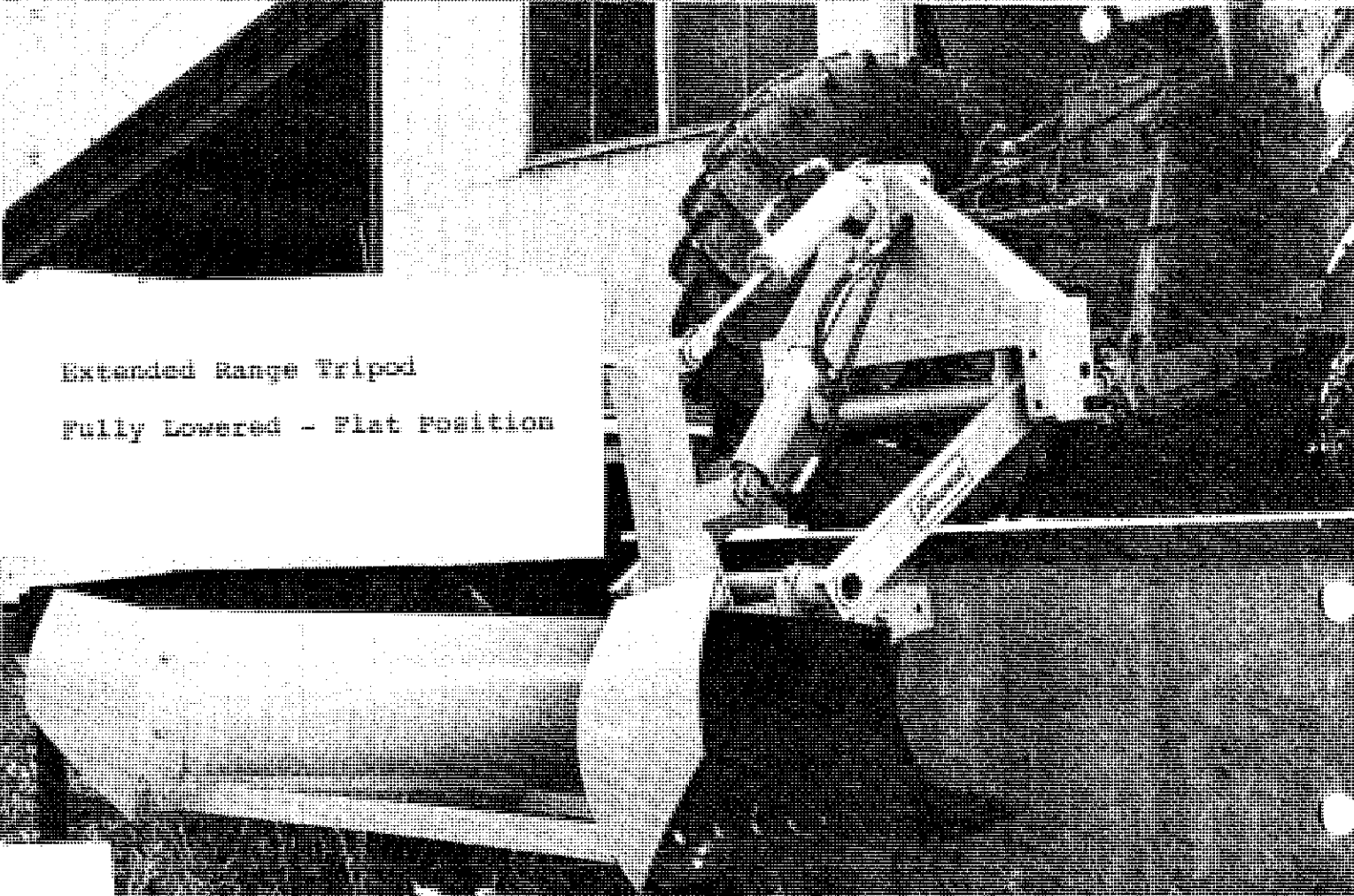
The optional wing extensions (Kit No. 151160) can be added to either the 5' or 7' wing. These extensions will widen the channel by pushing soil over the bank when set as shown on page 13, or when reversed, will spread the soil out to increase the channel's effectiveness as a drainage ditch.

NOTE: All of the old Eversman ditcher wings which were shipped with the 903000 wing shoe casting can be installed on any of the current tripods, or on the Carrier Assembly. However, if the owner needs to install a new 5' or 7' wing assembly on an old C-2 tripod, or the older style D-5 or D-6 carrier, then a 901810 adaptor kit must be ordered. (See drawing on page 10).



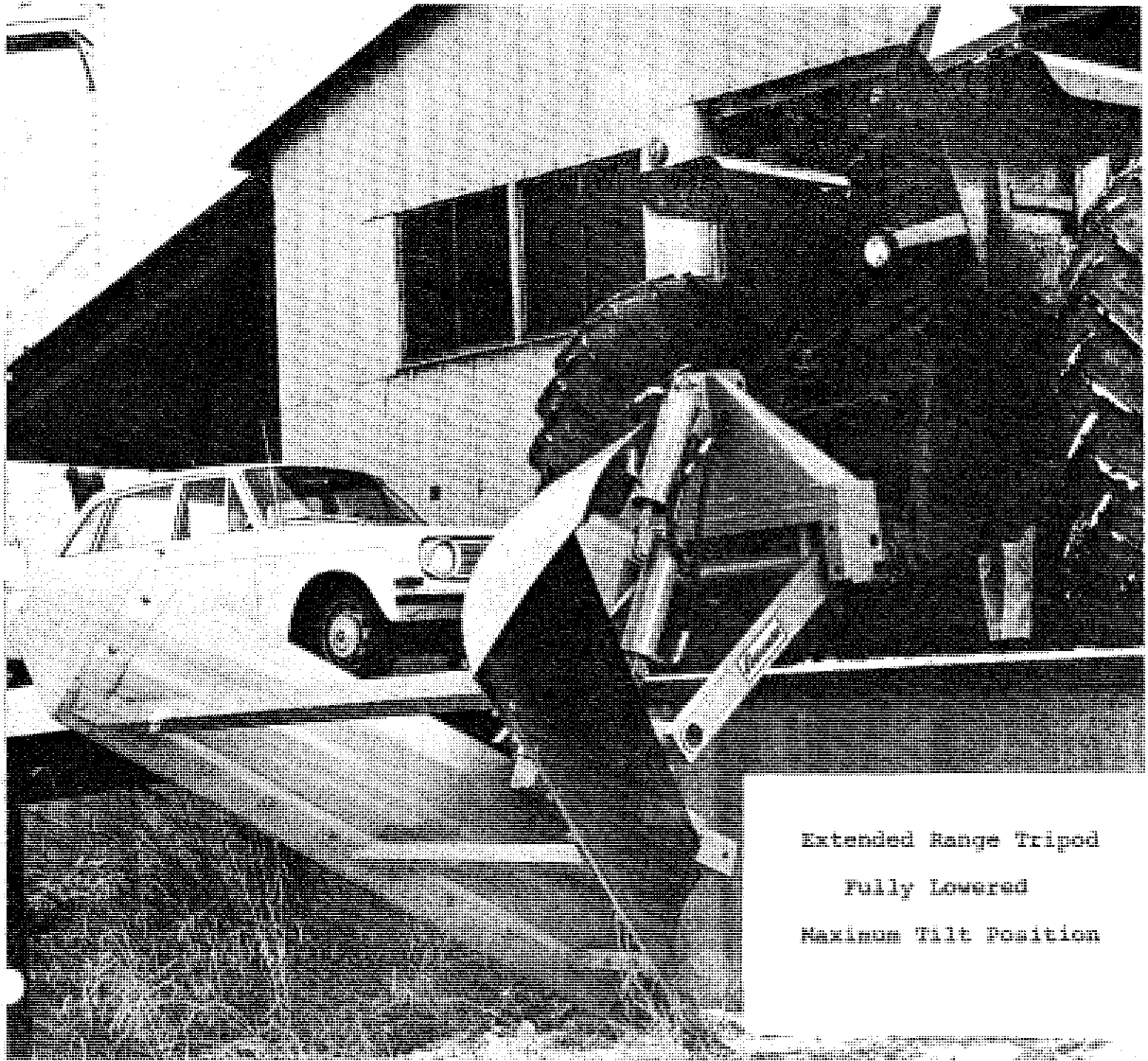
Extended Range Tripod
Fully Raised - Flat Position

A black and white photograph showing an extended range tripod in its fully raised position. The tripod is extended upwards, and its legs are spread out. The background shows a building with windows and some outdoor equipment.



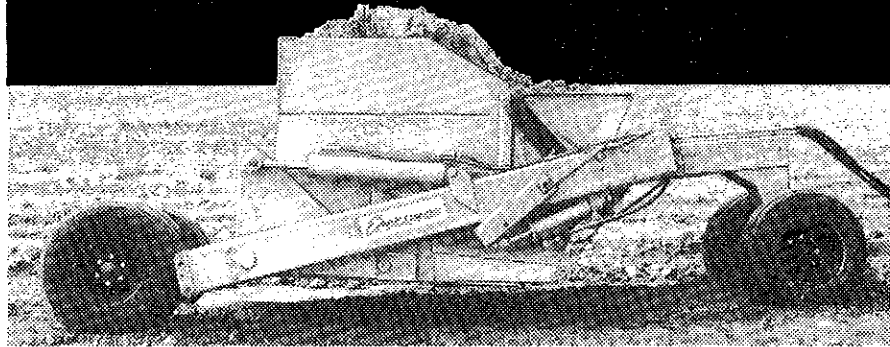
Extended Range Tripod
Fully Lowered - Flat Position

A black and white photograph showing the same extended range tripod in its fully lowered position. The tripod is extended downwards, and its legs are spread out. The background shows a building with windows and some outdoor equipment.



Extended Range Tripod
Fully Lowered
Maximum Tilt Position

NEW—FROM EVERSMAN
The most respected name in land forming
A 9-YARD SCRAPER
Designed for Large Farms and Modern Tractors



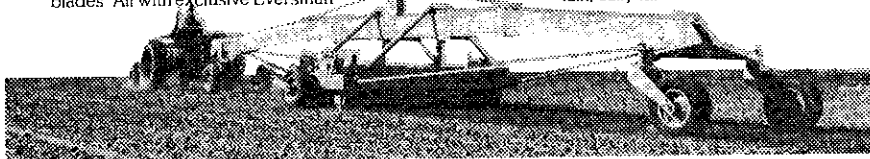
The Model 900 Hydraulic Scraper

9-yard Heaped Capacity
Single control valve operation · greater capacity
per dollar invested · high speed, easy loading ·
accurate, precise spreading with optional hydraulic
kit installed · low cost per yard investment · rugged
construction, a quality product

Helps you form moisture controlled fields for
increased yields · for irrigation · surface drainage ·
erosion control

The Eversman GRADE PLANE with Automatic Trip Blade

A series of large, rugged, precision land smoothers in 55' and 70' lengths · 12' or 14' cutting blades · All with exclusive Eversman crank axle design · Full castoring rear wheels and swivel connection at front tongue permits fast, easy turns at field ends

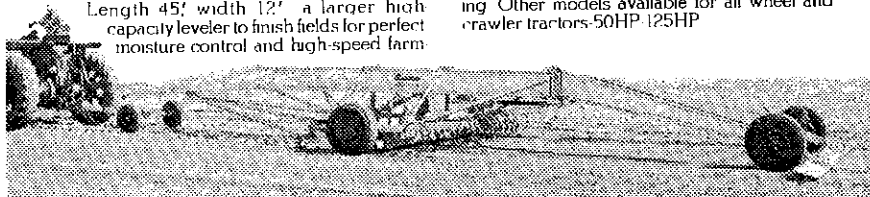


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