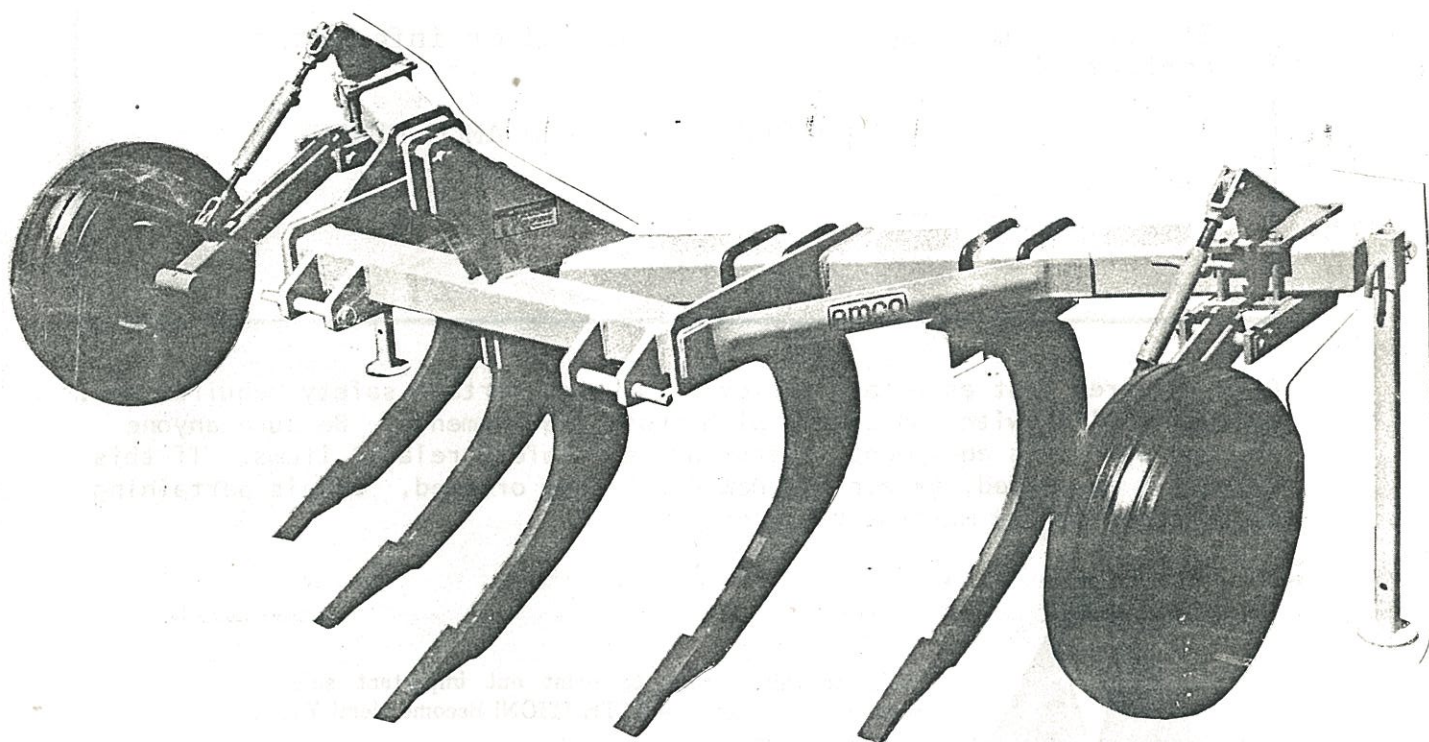


**Amco**

# V-PLOWS

## PARTS CATALOG OPERATION - MAINTENANCE - SET-UP INSTRUCTIONS



**Amco**

No. 1 AMCO Drive/Yazoo City, Miss. 39194/Phone (601) 746-4464  
Portable Elevator Division, Dynamics Corporation of America

# TO THE PURCHASER

The care you give your new AMCO V Plow will greatly determine the satisfaction and service you will obtain from it. By observing the instructions and suggestions in this manual, your AMCO V Plow will serve you well for many years.

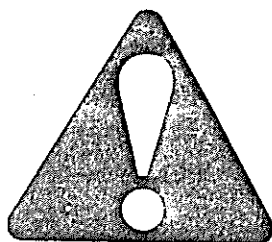
As an Authorized AMCO Dealer, we stock Genuine AMCO Parts, which are manufactured with the same precision and skill as the original equipment. For best performance and longer life use only Genuine AMCO replacement parts. Our factory trained staff is kept fully informed of the most efficient methods of servicing AMCO equipment and is ready and able to assist you.

When you sell your V Plow you should pass this manual to the new owner

If you should require additional aid or information, contact us.

YOUR AUTHORIZED AMCO DEALER

OSHA requires that as a farm employer you meet certain safety requirements. Become familiar with and comply with those requirements. Be sure anyone who operates this equipment understands all safety related items. If this harrow is repainted, be certain new decals are ordered. Decals pertaining to personal safety must be replaced.



Look for this symbol to point out important safety precautions. It means —ATTENTION! Become alert! Your safety is involved.

To insure efficient and prompt service, please provide the model number & serial number of your AMCO Plow in all correspondence or contacts. Remember, the right and left hand sides of the plow are determined by standing at the rear of the plow and facing the direction of travel.

MODEL NUMBER

SERIAL NUMBER

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# V - PLOWS

## STANDARD SPECIFICATIONS

**HITCH:** Heavy Duty "A" Frame for Cat. II and Cat. III three-point and quick coupler hitches

**FRAME:** V-Shaped of 5" x 7" x 3/8" tubing with front bracing on all models. Parking stands are standard equipment.

**SHANKS:** Flame cut from 1-1/4" thick high-strength, low alloy steel. Parabolic design for increased soil lift and soil fracture. Shear bolt protection from 5/8" Grade 5 bolts.

**POINTS:** Replaceable 12" x 2-1/2" x 1" high carbon, heat treated steel.

**TRANSPORT WIDTH:** Toolbar length plus 5"

MODEL	NUMBER OF SHANKS	SHANK SPACING	SHANK SIZE	CUTTING WIDTH	TRANSPORT WIDTH	RECOMMENDED GAUGE WHEELS	APPROX. DRAWBAR HORSEPOWER REQUIRED	WEIGHT WITH STANDARD EQUIPMENT	WEIGHT WITH OPT. GAUGE WHEELS
V2-5	5	18" 19" 20" 30"	28"	90" to 150"	12 ft. 5 in.	Single	90 - 105	1510	1830
V2-7	7	18" 19" 20"	28"	126" to 140"	12 ft. 5 in.	Single	115 - 130	1820	2140
V2-7A	7	30"	28"	210"	18 ft. 7 in.	Single	115 - 130	2000	2320
V2-9	9	18" 19" 20"	28"	162" to 180"	18 ft. 7 in.	Dual	145 - 160	2320	2745
V2-11	11	18" 19" 20"	28"	198" to 220"	18 ft. 7 in.	Dual	175 - 200	2630	3055
V3-5	5	18" 19" 20" 30"	33"	90" to 150"	12 ft. 5 in.	Single	90 - 105	1600	1920
V3-7	7	18" 19" 20"	33"	126" to 140"	12 ft. 5 in.	Single	115 - 130	1950	2270
V3-7A	7	30"	33"	210"	18 ft. 7 in.	Single	115 - 130	2140	2460
V3-9	9	18" 19" 20"	33"	162" to 180"	18 ft. 7 in.	Dual	145 - 160	2480	2905
V3-11	11	18" 19" 20"	33"	198" to 220"	18 ft. 7 in.	Dual	175 - 200	2830	3255

## OPTIONAL EQUIPMENT








Single gauge wheel (recommended for 5-7 shank models)

Dual gauge wheel (recommended for 9-11 shank models)

Wear strip (per shank)

## GENERAL TORQUE SPECIFICATION TABLE

ALL BOLTS SHOULD BE TIGHTENED TO THE RECOMMENDED TORQUES SHOWN IN THE "GENERAL TORQUE SPECIFICATION TABLE"

GENERAL TORQUE SPECIFICATION TABLE									
USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN									
<b>Note:</b> These values apply to fasteners as received from supplier, dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly-disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.									
SAE Grade No		2		5		8 *			
Bolt head identification marks as per grade NOTE: Manufacturing Marks Will Vary				  		  			
Bolt Size		Torque Foot Pounds		Torque Foot Pounds		Torque Foot Pounds			
Inches	Millimeters	Min	Max	Min	Max	Min	Max	Min	Max
1/4	6.35	5	6	9	11	12	15		
5/16	7.94	10	12	17	20	24	29		
3/8	9.53	20	23	35	42	45	54		
7/16	11.11	30	35	54	64	70	84		
1/2	12.70	45	52	80	96	110	132		
9/16	14.29	65	75	110	132	160	192		
5/8	15.88	95	105	150	180	220	264		
3/4	19.05	150	185	270	324	380	456		
7/8	22.23	160	200	400	480	600	720		
1	25.40	250	300	580	696	900	1080		
1-1/8	25.58			800	880	1280	1440		
1-1/4	31.75			1120	1240	1820	2000		
1-3/8	34.93			1460	1680	2380	2720		
1-1/2	38.10			1940	2200	3160	3560		
* Thick nuts must be used with Grade 8 bolts									

AMCO PL Effective January 1, 1983

F.O.B. Yazoo City, Mississippi

SPECIFICATIONS AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE

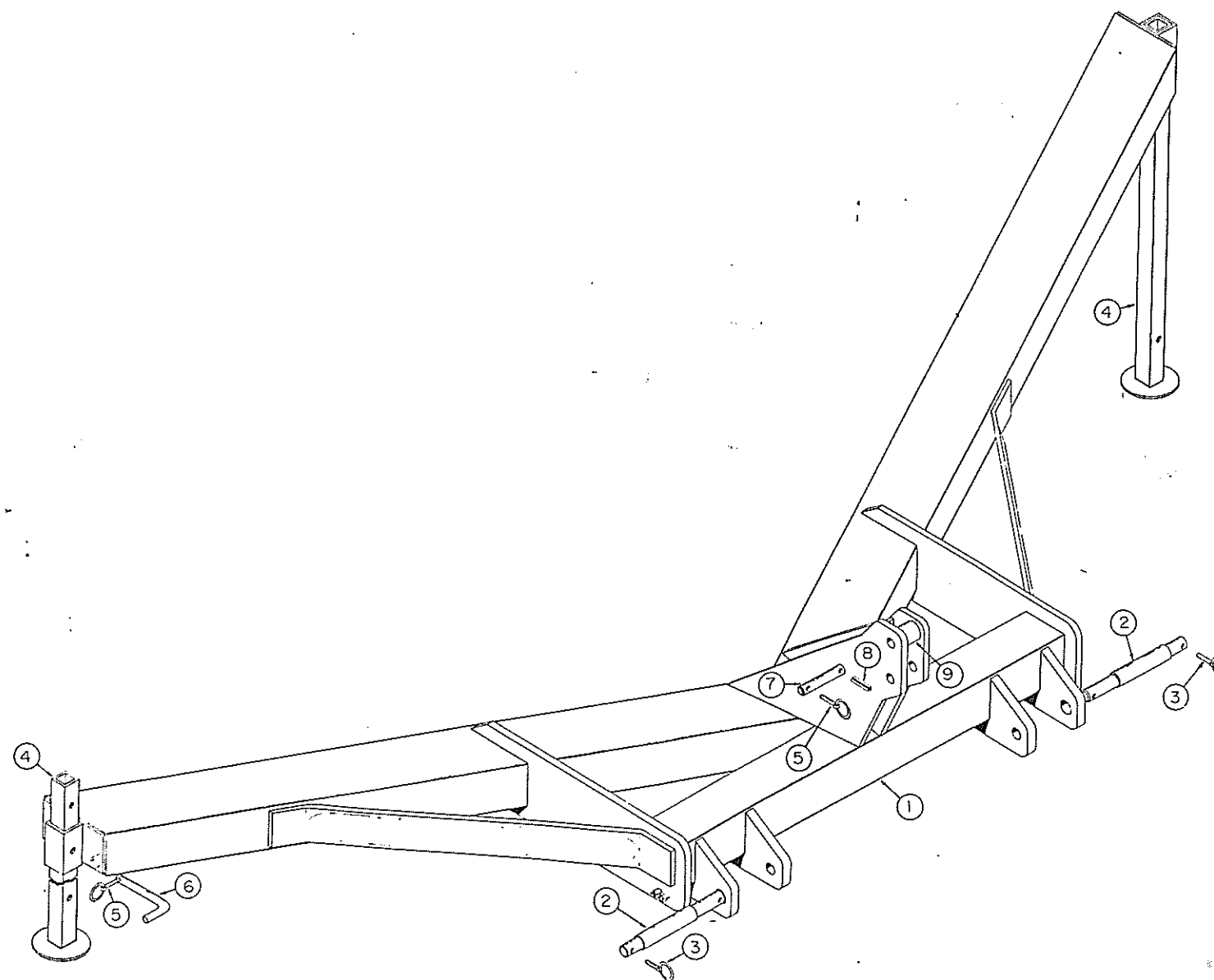


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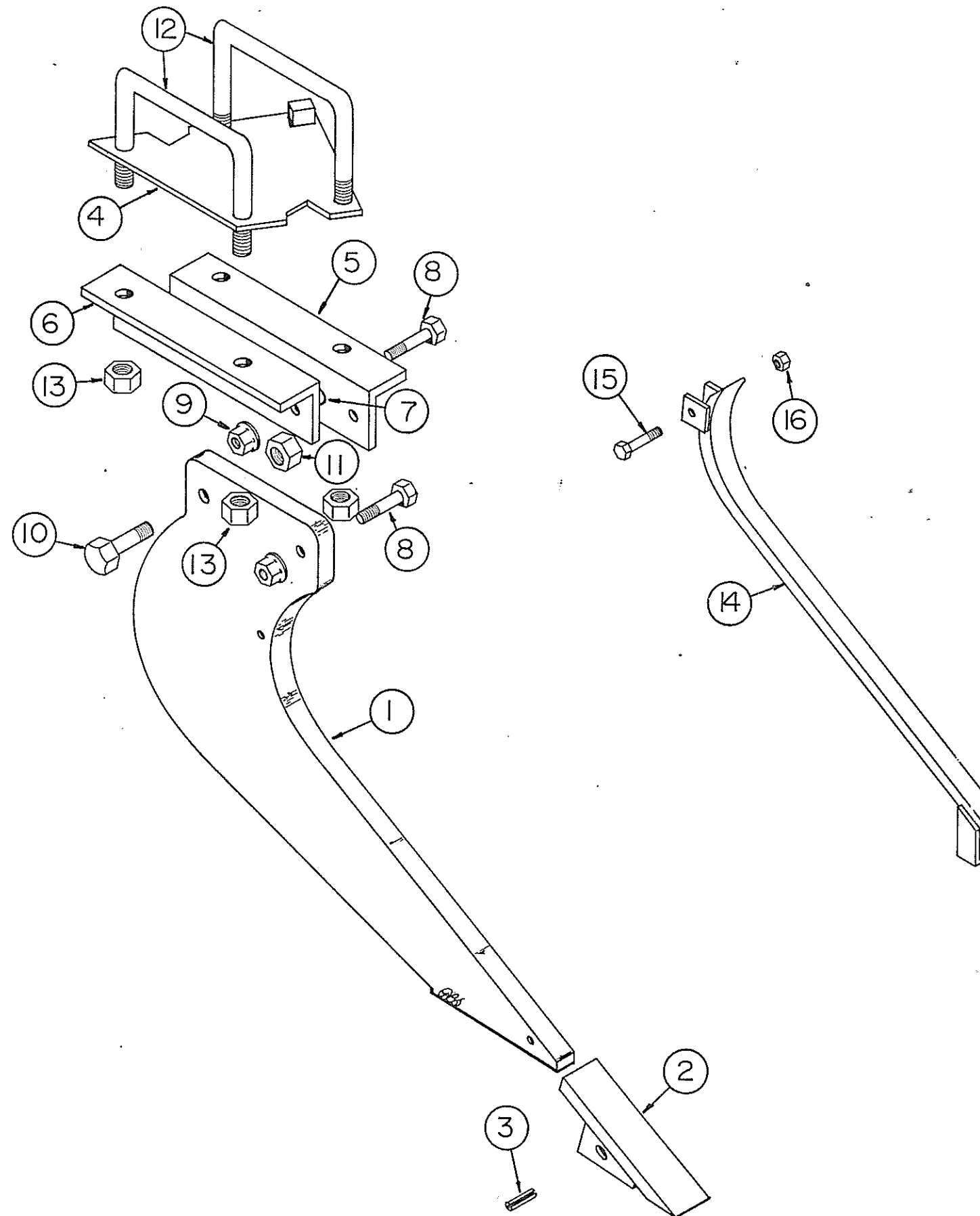


AMCO "V" PLOW

Main Frame



Ref. No.	Part No.	Description	No. Req'd
1	20299	Assy. Main Frame (Small).....	1
1	20300	Assy. Main Frame (Large).....	1
2	101739	Lower Hitch Pin 1 7/16 Dia. 12 9/16" Long...	2
3	11697	Klik Pin 7/16 Dia.....	2
4	20166A	Assy. Parking Stand.....	2
5	10317	Klik Pin 1/4".....	3
6	100683	Lock Pin 3/4 Dia.....	2
7	101333	Upper Hitch Pin 1" Dia. 5 1/4" Long.....	1
8	10910	Roll Pin 5/16 Dia. 2 1/4" Long.....	1
9	6570	Bushing 1 1/4 O.D. x .109 WT - 2" Long.....	1



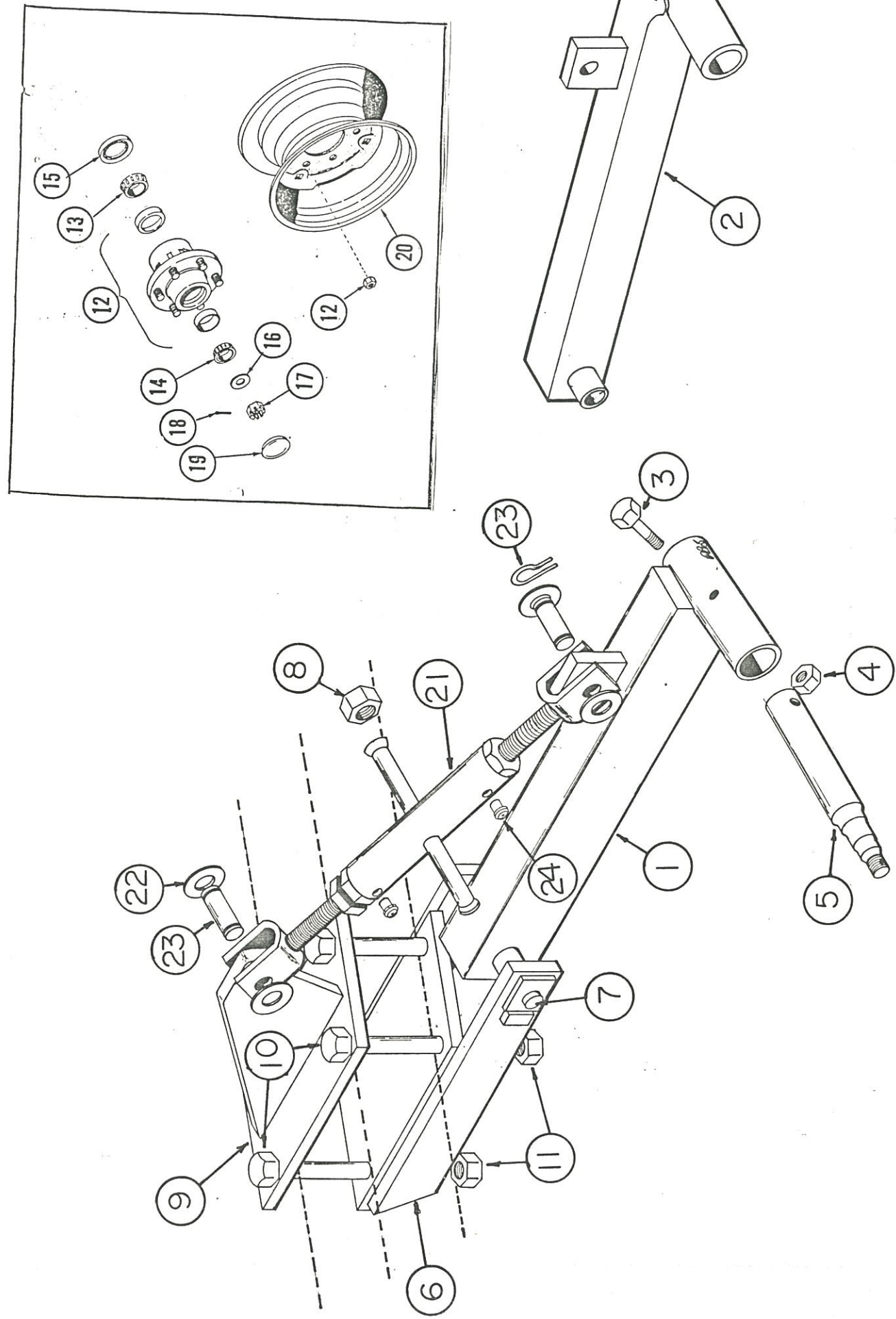
## AMCO "V" PLOW

## SHANK &amp; MOUNTS

Ref. No.	Part No.	Description	No. Required	
			Center Shank	Mount Shank
1	101758	Shank 28".....	1	1
1	101759	Shank 33".....	1	1
2	11936	Shank Point.....	1	1
3	11937	Roll Pin 3/8 Dia. 2" Long.....	1	1
4	20304	Assy. Twist Plate.....	-	1
5	101762	Angle - LH 4 x 3 x 1/2 $\angle$ - 15 1/2" Long	-	1
6	101763	Angle - RH 4 x 3 x 1/2 $\angle$ - 15 1/2" Long	-	1
7	101693	Bushing 1" OD x 3/16 WT. 1 9/32" Long...	-	1
8	10201	Hex Screw 5/8 x 3 NC, PLT, GRB.....	1	2
9	11647	Flange Lock Nut 5/8 NC, PLT, GRG.....	1	2
10	10727	Hex Screw 3/4 x 3 NC, PLT, GR5.....	1	1
11	10300	Lock Nut 3/4 NC, PLT, GRB.....	1	1
12	11935	"U" Bolt 7/8 Dia. 22 7/16" Long.....	-	2
13	10396	Lock Nut 7/8 NC, PLT, GRB.....	-	4
- OPTIONAL -				
14	20317	Assy. Wear Strip.....	1	1
15	10765	Hex Screw 3/8 x 2 1/2 NC, PLT, GR5.....	1	1
16	10509	Lock Nut 3/8 NC, PLT, GRB.....	1	1



AMCO "V" PLOW  
DEPTH GAUGE KITS

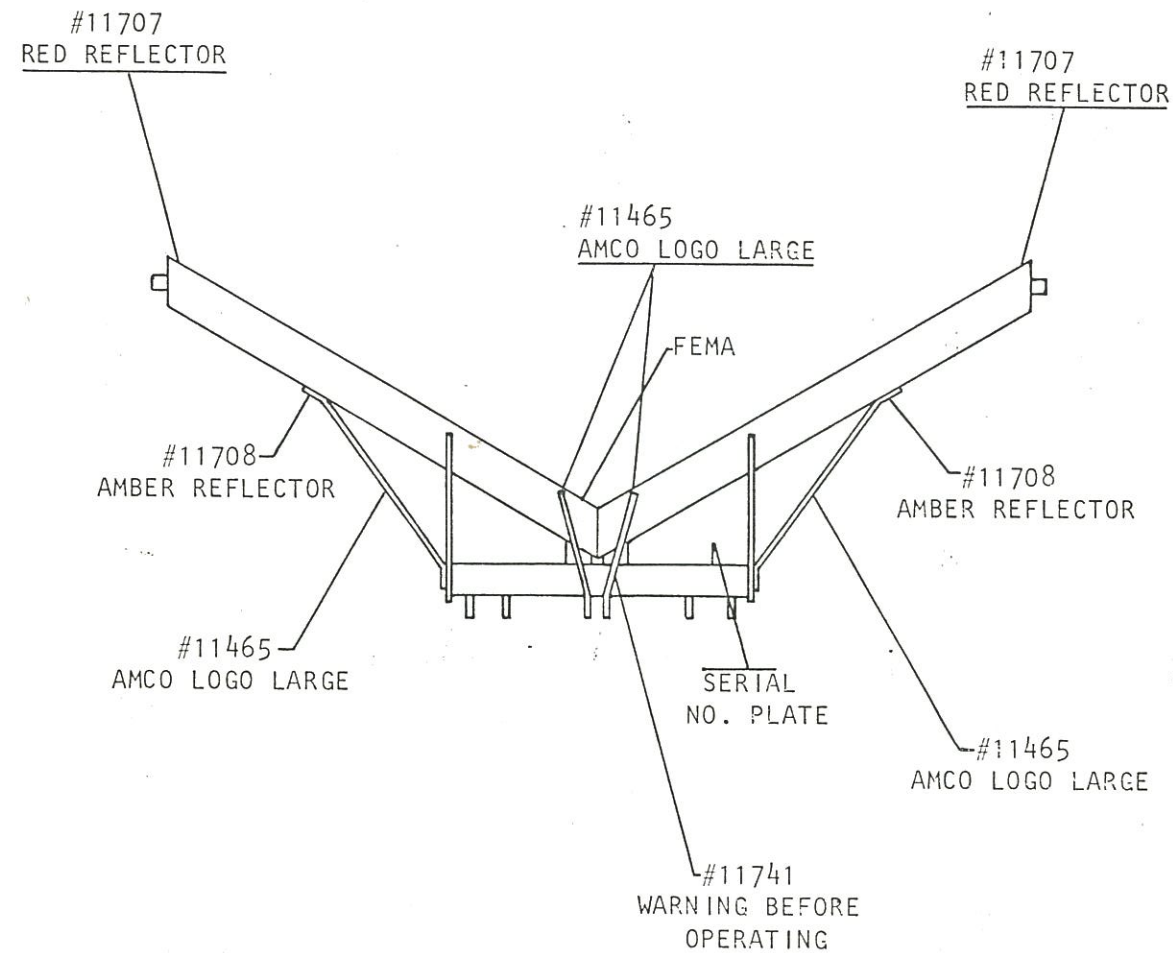


Ref. No.	Part No.	Description	No. Req'd	
			Single	Dual
1	20313	Assy. Single Wheel Leg - RH.....	1	-
1	20314	Assy. Single Wheel Leg - LH.....	1	-
2	20315	Assy. Dual Wheel Leg.....	-	1
3	10871	Hex Screw 3/8 x 3 NC,PL,GR5.....	1	2
4	10509	Lock Nut 3/8 NC,PL,GRB.....	1	2
5	11643	Spindle 1 3/4 Dia. C1141 - 12" Long.....	1	2
6	20308	Assy. Spindle Leg Mount - LH.....	1	1
6	20309	Assy. Spindle Leg Mount - RH(shown).....	1	1
7	20123	Assy. Pivot Pin 1" Dia. 8 3/8" Long.....	1	1
8	10868	Lock Nut 1" NC,PL,GRB.....	1	1
9	20310	Assy. Turnbuckle Mount - RH(shown).....	1	1
9	20311	Assy. Turnbuckle Mount - LH.....	1	1
10	10697	Hex Screw 3/4 x 7 1/2" NC,PL,GR2.....	4	4
11	10300	Lock Nut 3/4 NC,PL,GRB.....	4	4
12	11644	Hub - w/2 Cups & 6 Lug Bolts, Nuts(F&H#106675)	1	2
13	10353	Cone - Inner Timken #LM48548.....	1	2
14	10295	Cone - Outer Timken #LM67048.....	1	2
15	11017	Grease Seal C/R #17618.....	1	2
16	10263	Spindle Washer 7/8".....	1	2
17	10264	Spindle Nut 7/8 NF.....	1	2
18	10291	Cotter Pin 5/32 x 1 1/4.....	1	2
19	10356	Hub - Cap.....	1	2
20	10936	Wheel 15 x 8 - 6 Hole.....	1	2
21	20307	Assy. Turnbuckle.....	1	1
22	10879	Flat Washer 1" PL (position inside turnbuckle clevis)	4	4
23	11396	Assy. Pin 1" Dia. x 2 7/8" Long(w/2 Hair Pin Clips)	2	2
24	11081	Grease Fitting 5/16 Straight Drive-type.....	2	2

NOTE: ALWAYS SPECIFY RH OR LH WHEN ORDERING REPLACEMENT PARTS



## DECALS



QTY.	PART NO.	DESCRIPTION
(1)	#11741	WARNING BEFORE OPERATING
(2)	#11708	AMBER REFLECTOR
(2)	#11707	RED REFLECTOR
(1)	#11548	FEMA
(4)	#11465	AMCO LOGO LARGE

## assembly instructions

The V-Plow is shipped from the factory with maximum pre-assembly in the following bundles:

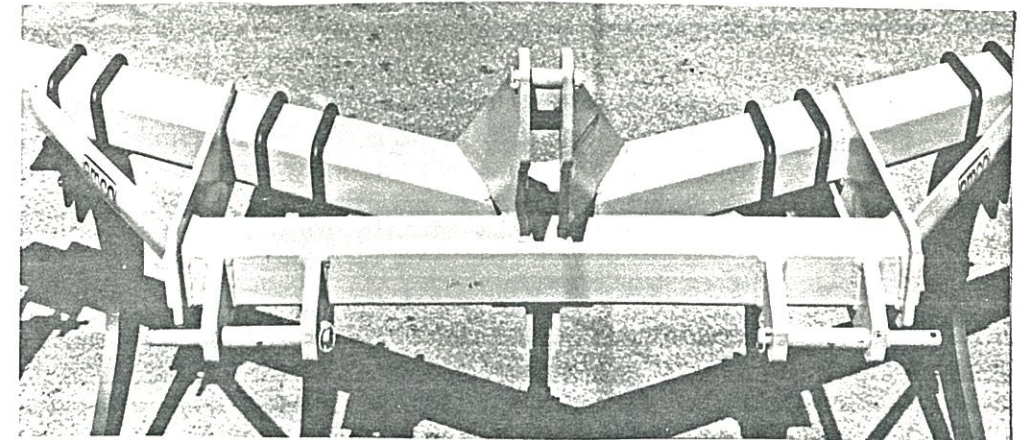
- A. Main Frame
- B. Center Shank
- C. Right Hand Shanks
- D. Left Hand Shanks
- E. Gauge Wheels

Place all bundles where they will be convenient. Arrange loose parts so they may be readily seen when needed. To insure good alignment of the units and parts, always insert all screws leaving the nuts loose. Tighten the nuts evenly to prevent misalignment, distortion, or binding. Be sure all screws are tight and all pins properly inserted.

1. Select a clean level area for assembly. Place all parts and bundles where they will be readily accessible during assembly. Remove strapped-on parts from main frame. NOTE: The right hand and left hand sides of the V-Plow are determined by standing at the rear of the plow and facing the direction of travel.
2. Place the main frame upside down on the shop floor or on sturdy stands.

**CAUTION** Use sturdy stands to prevent frame from falling.

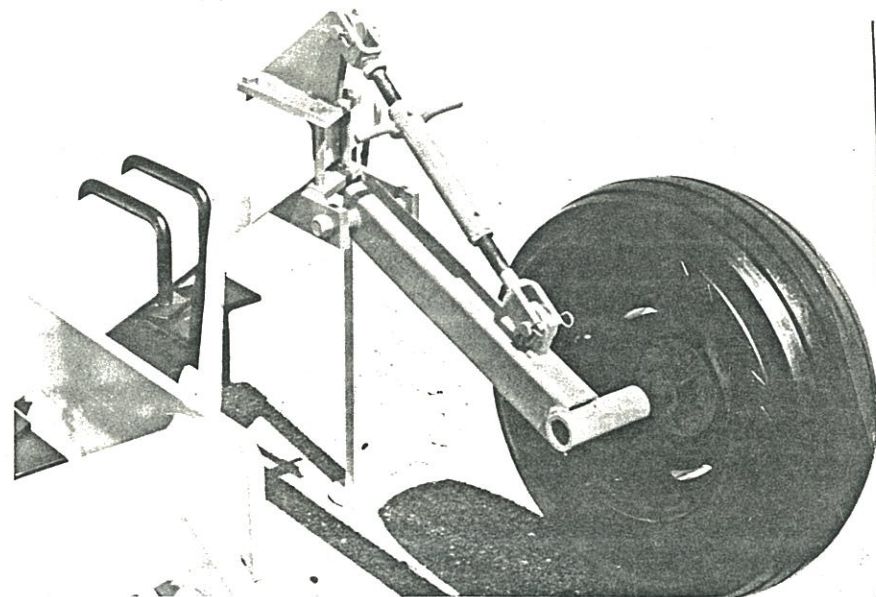
3. Attach the center shank with a 3/4" pivot screw and a 5/8" shear screw.
4. Mark the location of each shank to give the desired shank spacing. The shanks may be mounted on 18, 19, 20, or 30 inch centers.



5. Attach the shanks to the main frame on the desired spacing with 7/8" "U" bolts. Be sure that the twist plates are between the shank angles and the main frame. Locate the stop on the twist plate mounts to the rear of the main frame. EXCEPTION: The stop mounts to the front of the main frame on the two shanks adjacent to the center shank when the shanks are mounted on 30" spacing.

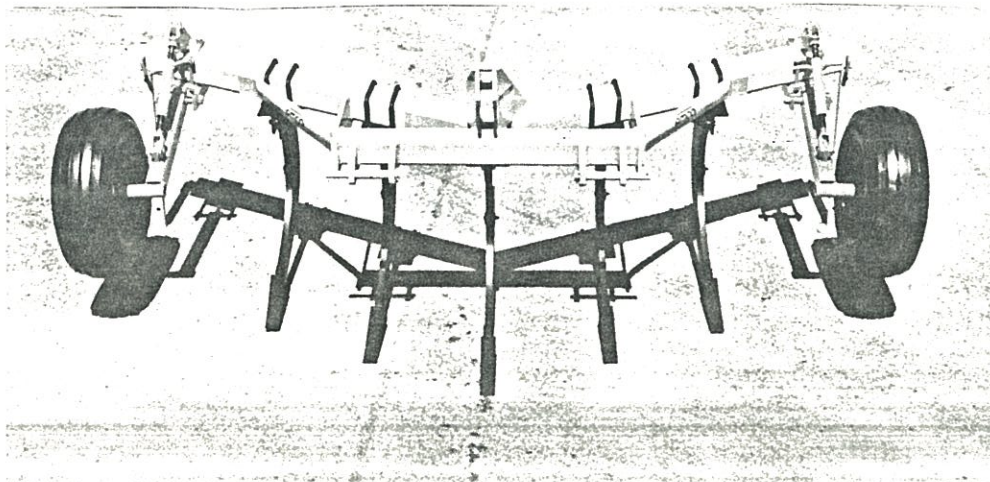


6. Tighten all screws and "U" bolts to the proper torque. Refer to the Torque Specification Table.
7. Place the V-Plow upright on the shanks. Attach the transport stands.  
CAUTION: Be sure the V-Plow is well supported with the parking stands to prevent it from tipping backward.
8. Mount the right hand and left hand gauge wheels to the main frame with 3/4" screws. The gauge wheels should be mounted outside of the outside shanks on models equipped with the 144" main frames. The gauge wheels should be mounted inside of the outside shanks on 218" main frame models.



#### FINAL CHECK

1. Grease the fittings on the gauge wheel turnbuckles.
2. Check decals to be certain they are in place and good condition. Touch-up paint as required before delivery. Place operators manual in heavy plastic shipping bag. Tape bag to main frame to insure that the operator's manual will be delivered to your customer along with the plow.
3. Review all steps of the assembly to be certain the plow is properly assembled. Check all screws to be sure they are properly torqued.



## operating instructions

Your new AMCO V-Plow has been set up, inspected, and adjusted by your dealer before delivery. However, before using your new V-Plow, or one that has been stored, make certain that all nuts and screws are tight.

This instruction manual should be carefully read to enable the operator to care for and operate the V-Plow properly. The right and left sides of plow are determined by facing the direction of travel.

**HITCH:** AMCO V-Plows are designed to accept ASAE Category II and III three-point hitches and quick couplers. The lower hitch pins may be inserted into the lower pull points as shown in Figure 1 and 2. Figure 1 illustrates the lower hitch pin arrangement for use with Category II three-point-hitches. Figure 2 illustrates the lower hitch pin arrangement for use with Category III three-point hitches and Category II and III quick couplers. The lower hole in the mast is used on Category II hitches and the upper hole is used on Category III hitches. A bushing is supplied for use on the upper hitch pin.

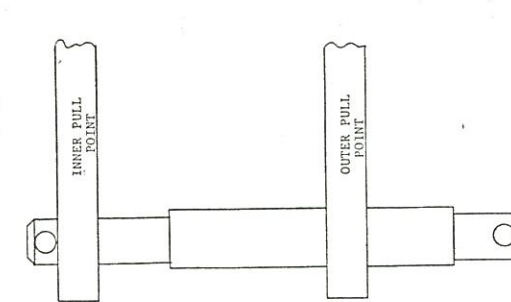


FIGURE 1  
For use with Category II  
three-point-hitches only

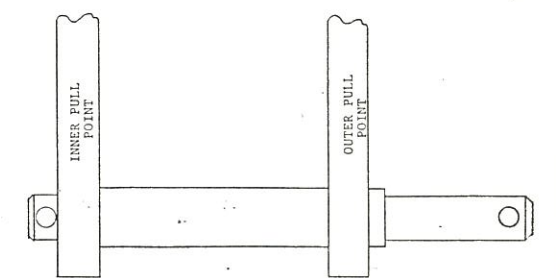


FIGURE 2  
For use with Category III  
three-point-hitches & Category  
II & III quick couplers

**PARKING STANDS:** Adjustable parking stands should be raised and pinned for transport or field work. The plow should be parked on level ground to prevent the possibility of a tipover.

**CAUTION!** Lower parking stands before unhitching V-Plow. After parking V-Plow, always check to make sure that it cannot be over-turned backward accidentally.

**DEPTH CONTROL:** The working depth of the V-Plow is controlled by the tractor three-point hitch system and the gauge wheels. The adjustable stops on the three-point hitch control lever can be used to lower the V-Plow to a pre-set depth. Gauge wheels are recommended to provide better control of operating depth. The turnbuckle on each gauge wheel should be adjusted to vary the working depth of the V-Plow. When adjusting the turnbuckles, be sure both gauge wheels are set at the same depth by measuring the distance across the turnbuckle pins. The maximum operating depth of the V-Plow is 16 inches.



**LEVELING:** The center link of the tractor's three-point hitch controls the fore-and-aft leveling of the V-Plow. The V-Plow should be operated with the front slightly lower than the rear. Observe frame levelness while operating the V-Plow at the working depth. Adjust the center link to obtain correct leveling.

**TRANSPORTING:** Raise the parking stand before transporting the V-Plow. **CAUTION!** Reduce speed when traveling over uneven ground to prevent loss of tractor control if an outer shank should strike the ground.



**CAUTION:** When transporting farm implements on public roads after dusk, it is the responsibility of the operator to provide lighting and reflectors on the rear of the implement in accordance with your state law.



**CAUTION:** When transporting machinery over public roads, comply with your local and state laws regarding length, width and lighting.

**TRACTOR DRAWBAR:** Remove the tractor drawbar or position it to the far right or left. **IMPORTANT:** If left in the center position the drawbar could be damaged by the center shank when the V-Plow is raised. Deep subsoiling or heavy residue may require removal of the drawbar.

**BALLAST:** Rear wheel weights may be required to control excessive wheel slippage. However, some slippage is necessary for proper tractor performance and weights should not be added to eliminate all slippage. Adequate front end weight is necessary for safe and efficient tractor operation. Refer to your tractor operator manual for front and rear ballast recommendations for proper V-Plow operation.

**CAUTION!** Maximum allowable front end weights may be required to prevent front end-tip up when operating the V-Plow in the field at less than 4 MPH.

**MAINTENANCE:** Keep all screws tight. All screws should be tightened to the recommended torques shown in the General Torque Specification Table. Check all screws before placing V-Plow in service and visually inspect all screws daily. Retighten screws after the first 50 hours of operation and at the beginning of each season.

**SHEAR SCREWS:** Tripping the shear screw may cause the shank clamp screws to loosen. Check the screws in the shank clamp when replacing a shear screw. Replace the shear screw only with a 5/8 x 3" Grade 5 Hex Screw.