



PREPMASTER®

The One Pass Pre-Plant Seedbed Preparation Tool

Operator's & Repair Parts Manual with Set-Up Instructions

| For Models: | Rigid Frame | Direct Fold Frame (90°) | Stack Fold Frame |
|-------------|-------------|-------------------------|------------------|
| | 909-545 | 909-608 | 909-708 |
| | 909-565 | 909-609 | 909-709 |
| | 909-585 | 909-612 | |
| | 909-587 | 909-613 | |



Do Not Use or Operate this Equipment



Until this Manual has Been Read and Understood

The purpose of this manual is to explain maintenance requirements and adjustments which are necessary for the most efficient operation of the machine. Read this manual thoroughly and completely before using your machine. Keep this manual handy for reference when questions arise.

Should you have questions or difficulties which your dealer or representative are unable to answer, please call or write:

Bigham Brothers, Inc. 705 E. Slaton Rd. P.O. Box 3338 Lubbock, TX 79452
Telephone: (806) 745-0384 Fax: (806) 745-1082



SAFETY FIRST

**PREVENT ACCIDENTS BY "THINKING SAFETY"
IN UNLOADING, SETTING UP, MOVING, STORAGE
AND OPERATING ALL EQUIPMENT.**

BB BIGHAM BROTHERS, INC.

806-745-0384 • 705 E. Slaton Road • P.O. Box 3338 • Lubbock, Texas 79452

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BIGHAM BROTHERS, INC.

A MESSAGE TO THE OWNER AND OPERATOR:

This machine was carefully designed and manufactured to give you dependable service. To keep it running efficiently, read the instructions in this Operator's Manual. Check each item and acquaint yourself with the adjustments required to obtain efficient operation and maximum performance. Remember, the machine's performance depends on how you operate and care for it.

After the operating season, thoroughly clean your machine and inspect it. Preventive maintenance saves time and pays dividends. Your dealer has original equipment parts which assure proper fit and best performance. Record the model number, serial number and date of purchase in the space provided on this page. Your dealer needs this information to give you efficient service when you order parts or attachments. The model number and serial number appear on the identification plate on the front left side of the tool bar mast.

The Warranty on your machine is included with this manual. Your dealer will review both this manual and the warranty with you when you take delivery of your machine.

Model Number _____ 909- _____

Serial Number _____

Date Purchased _____

WARRANTY

Bigham Brothers, Inc. warrants all products of its manufacture to be free from defects in materials and workmanship for a period of six months from date of delivery to the retail purchaser. Parts assumed to be defective must be returned F.O.B. Lubbock, Texas for our inspection or inspected in the field by our authorized representative. Our obligation under this warranty is limited to replacement or repair of the defective part and does not cover other damages to persons or property. Other than the aforesaid, no warranties of merchantability or fitness for a particular purpose will apply. We do not assume liability for altered or remanufactured components or machines or applications beyond their intended use. Some states do not allow limitation of how long an implied warranty lasts, or exclusions of, or limitations on relief such as incidental or consequential damages, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Warranty does not cover damage due to abuse, neglect, collision, towing, pulling, normal wear and tear or any other factor beyond the control of the manufacturer. Tool bars that are bent, bowed or that have been welded on or modified in any way are specifically excluded from any warranties.

LIMITED LIFETIME WARRANTY ON TOOL BAR CLAMPS

Bigham Brothers, Inc. will replace any ductile iron clamp body that breaks or cracks under normal use for as long as the original purchaser owns them. This includes all replaceable bolt ductile iron clamps sold by Bigham Brothers, Inc. after December 31, 1987.

Clamps that fail should be returned to Bigham Brothers, Inc. freight prepaid along with caps, bolts, set screws and nuts for evaluation. If found to have failed under normal operating conditions, a new clamp body will be returned along with your old caps, bolts, set screws and nuts. Only clamps that have been used with Grade 2 bolts of the proper size will be replaced. All other provisions of the above warranty apply.

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Safety Precautions:

Be alert when you see this symbol in the instructions.

It warns of a hazard which might lead to injury.

It means: “Attention! Become Alert! Your Safety Is Involved!”

Before Use: **DO NOT operate this equipment until this** **manual has been read and understood.**

- * Thoroughly read and understand all instructions before assembly or operation of this unit. If you have questions call or write Bigham Brothers, Inc., P.O. Box 3338, Lubbock, TX 79452 (800) 692-4449.
- * If working on the PrepMaster, make sure it is level and stable. Proper stands should be lowered and secured. Use support blocks when necessary. The work area should be on a level, load bearing surface, e.g. concrete floor. NEVER, NEVER work under a PrepMaster while it is supported by only the tractor's hydraulics.
- * Consult the “Tractor Manufacturers Manual” for instructions on safe mounting of implements and operating methods.
- * Never stand between the PrepMaster and tractor with engine running.

During Use:

- * Check and tighten all bolts after 30 minutes of initial operation and after adjustments have been made.
- * Assure the PrepMaster is correctly attached to the tractor with the proper stands in the raised position.
- * Keep operating speeds at a safe level.
- * Never allow anyone to ride on the PrepMaster during operation.
- * Never travel in reverse with the PrepMaster in the operating position.
- * Never carry out adjustments or repairs to a mounted PrepMaster unless the tractor engine is stopped and the PrepMaster is firmly supported or lowered to the ground.
- * Inspect the PrepMaster for wear or damage.
- * Check all nuts, bolts and other fasteners for tightness on a regular basis. Replace worn fasteners as needed.
- * Carry out maintenance and lubrication procedures as detailed in this manual.
- * When disconnecting the PrepMaster do so on a level, hard surface. Assure it is left in a stable position with proper stands in the correct position.

Always:

- * Wear gloves and safety footwear when handling worn parts with sharp edges.
- * Assure the PrepMaster is not operated by untrained persons.
- * Use the PrepMaster only for the purpose for which it was designed and tested, and always according to the instructions contained in this manual.
- * Secure transport locks on folding PrepMaster frames before transporting.
- * Reduce speed when transporting over uneven or rough terrain.
- * Place a “Slow Moving Vehicle” emblem on the rear of the unit before driving on open roads.
- * Keep hands, feet and clothing away from all moving parts.
- * Exercise care when adjusting or moving major components such as chopper or bed conditioner assemblies. The assemblies are heavy and may have sharp edges.

“Left” and “Right” of the machine refers to the side when standing behind the PrepMaster and facing the tractor.

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**BE A SAFE OPERATOR, THINK BEFORE OPERATING.
READ ALL INSTRUCTIONS BEFORE
ASSEMBLY OR OPERATION OF THE PREP MASTER!**

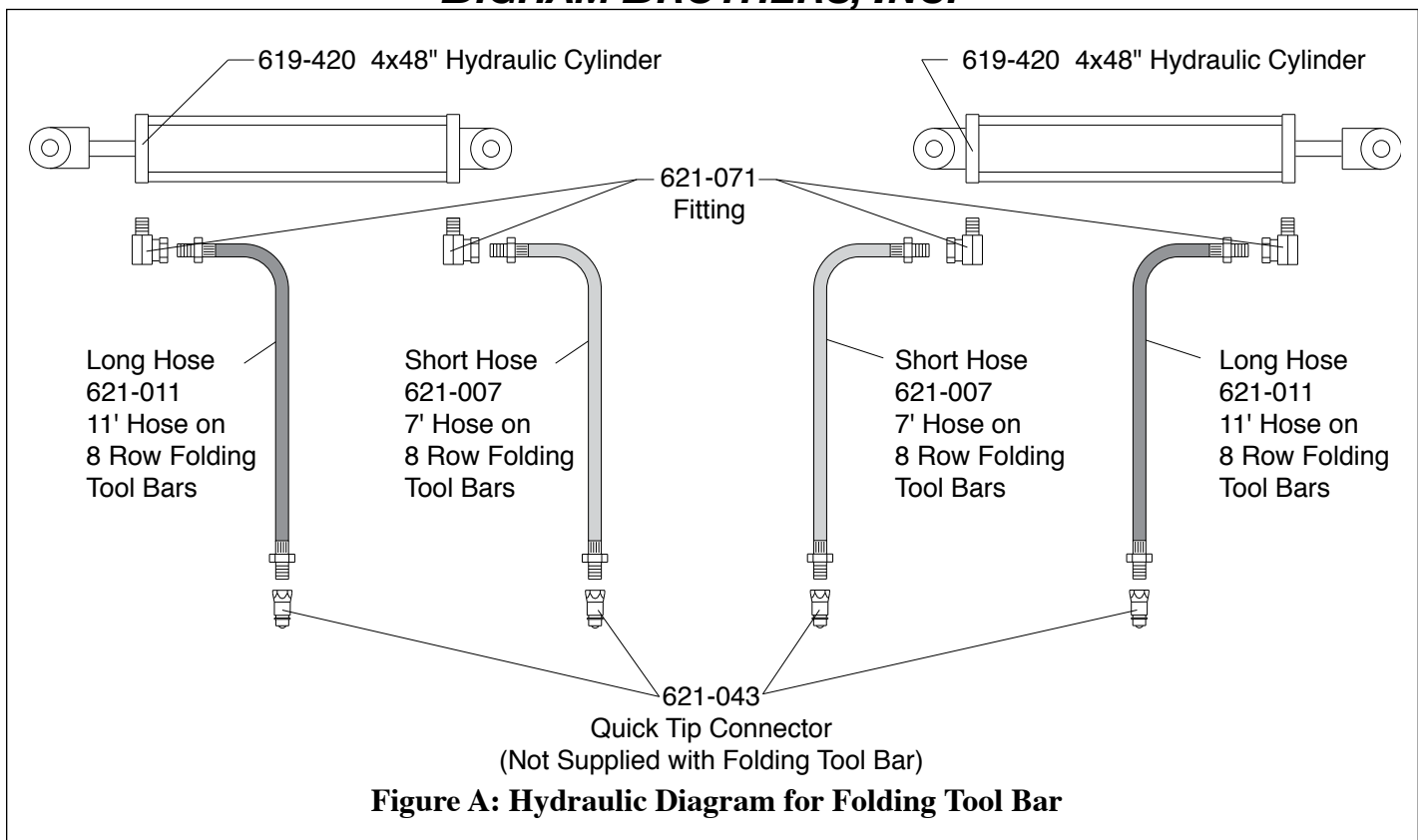


Picture 1- Eight Row PrepMaster on Folding Frame P/N 909-608

INTRODUCTION:

The Bigham Brothers PrepMaster® Bed Conditioner is a pre-plant bed preparation tool that will provide a perfectly prepared seedbed for a variety of planting conditions in just one pass! The PrepMaster® executes several operations critical to planting in one field pass. Front sweep and chopper will cut stalks into small pieces, distribute the buried stalks and knock down the crown of the bed. Center basket with spiral blade will incorporate chemicals and condition the top of the bed. Rear roller will flatten and firm the seedbed.

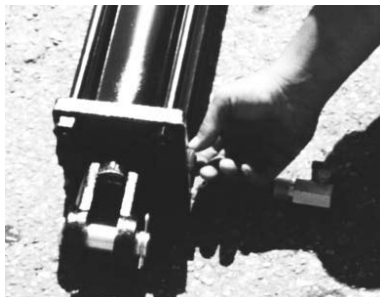
| P/N | Description | Rows | Frame | Row Space | Frame Lgth. | Trans. Wdth | Ship Wt. |
|---------|-------------|------|----------------|-----------------|-------------|-------------|-----------|
| 909-545 | PREPMASTER® | 4 | Rigid | Wide (36-40") | 14'6" | 14'10" | 3140 Lbs. |
| 909-565 | PREPMASTER® | 6 | Rigid | Wide (36-40") | 20'8" | 21' | 4535 Lbs. |
| 909-585 | PREPMASTER® | 8 | Rigid | Wide (36-40") | 27'6" | 27'10" | 5890 Lbs. |
| 909-587 | PREPMASTER® | 8 | Rigid | Narrow (30-34") | 23'2" | 23'6" | 5610 Lbs. |
| 909-608 | PREPMASTER® | 8 | Fold (90°) | Wide (40") | 27'6" | 18'10" | 6335 Lbs. |
| 909-609 | PREPMASTER® | 8 | Fold (90°) | Narrow (30") | 23'2" | 16' | 6055 Lbs. |
| 909-612 | PREPMASTER® | 12 | Fold (90°) | Wide (40") | 40'10" | 25' | 9190 Lbs. |
| 909-613 | PREPMASTER® | 12 | Fold (90°) | Narrow (30") | 34'8" | 21'8" | 8850 Lbs. |
| 909-708 | PREPMASTER® | 8 | Fold (Stacker) | Wide (40") | 27'6" | 16'6" | 6740 Lbs. |
| 909-709 | PREPMASTER® | 8 | Fold (Stacker) | Narrow (30") | 23'2" | 14'10" | 6410 Lbs. |



Assembly Instructions

Folding Tool Bar:

1.) Remove temporary port plug from clevis end of cylinder. (Picture 2)



Picture 2- Remove plug.

2.) Install and tighten fittings supplied in each port of the cylinder. See Diagram

A. Position fitting to direct hoses to the base end of the cylinder. Fittings may be supplied with a pipe thread or Boss O-Ring type fitting to match cylinders. **Never use "Teflon" tape to seal threads on either type fitting.**

3.) Each folding frame is supplied with two long hoses and two short hoses. Screw a long hose into the fitting in the outside port of the cylinder. Tighten the hose fitting. Place short hose in fitting in the base end of the cylinder and tighten.

4.) Connect each hydraulic cylinder to hydraulic remote on tractor or a suitable hydraulic test stand. (Picture 3)
Note: Folding bars are not supplied with quick tip connectors to plug into tractor hydraulic remotes.

5.) Stroke each cylinder at least 3 or 4 times to purge air from cylinder and hoses.

Note: Each 4x48" cylinder will require approximately 2.75 gallons (10.5 liters) of hydraulic fluid for full charging.

Maintain adequate levels of fluid in hydraulic power supply (tractor) while charging cylinders.

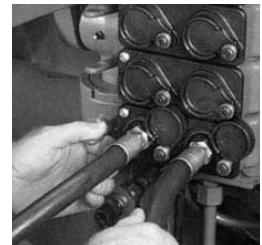
Failure to maintain fluids in tractor can result in damage to hydraulic system and transmission.

⚠ Hydraulic fluid is under high pressure. Be careful when you are close to cylinders, hoses and fittings. Replace or repair leaking or damaged hydraulic components.

⚠ Never use your hands to locate a hydraulic leak. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate the skin.

Leave cylinder in the fully extended position

6.) Repeat steps one (1) through five (5) to charge second of two 4x48" cylinders.



Picture 3- Plug quick connect tips to tractor remote plugs.

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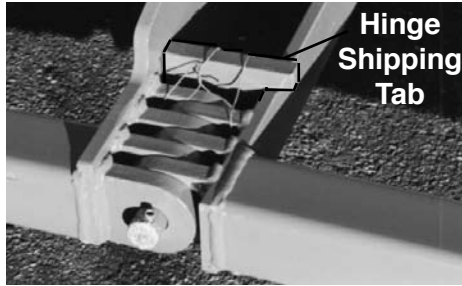
7.) Place folding bar assembly on a flat, level surface. You may wish to place blocks under the frame to support the center section and each wing for forklift access.

8.) Remove Hinge Shipping Tabs:



WARNING! Temporary hinge shipping tabs must be removed from each tool bar hinge before folding the tool bar.

A.) Remove wire that holds the tab in place. (Picture 4)



Picture 4 - Wire holds hinge shipping tab in place.

B.) Check shipping hinge tab to make sure it bears no weight.

C.) Remove tab. (Picture 5)

D.) Discard tab. (Picture 6)



Picture 5 - Remove hinge shipping tab from front hinge.

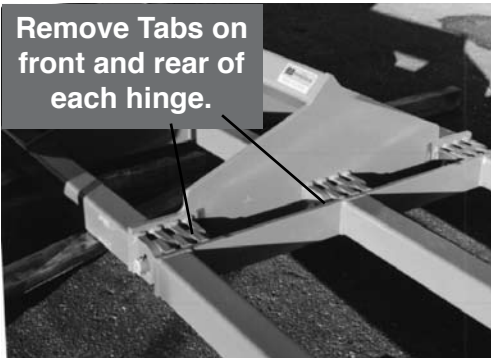


Picture 6 - Discard hinge shipping tab.

E.) Remove tab from rear of hinge and discard. (Picture 7)

F.) Remove remaining tabs from other hinge on other side of frame and discard. **Four (4) tabs must be removed before wings may be folded.**

Remove Tabs on front and rear of each hinge.



Picture 7 - Remove tab from rear hinge.

G.) Use paint to touch-up hinge area and other blemishes or scratches on the frame at this time.

9.) Place cylinder in position above the tool bar mast and align base end clevis



with the cylinder lug on the tool bar. Insert pin and fasten with proper retainers. (Picture 8) Note: It is suggested that you place the cylinder on a forklift, stand or use two persons to handle the cylinder. Cylinders are heavy and hard to handle.

Picture 8 - Install cylinder base pin.

10.) Insert pin through washers, wing lift slot, cylinder and eye bolt. (Picture 9) See parts diagram on page 24. Flat washers must be placed to the outside



Picture 9 - Insert wing lift pin.

and inside of the wing lift slot on both sides of the weldment. Attach nut and jam nut on eye bolt to provide down stop for wing. (Picture 10)

It is recommended that you strap hoses

to tool bar with plastic cable ties or other type retainers to keep hoses in place. Install ties after assembly of machine. Be sure to leave free hose for proper folding motion.

11.) Repeat steps nine (9) and ten (10) to install the second cylinder on the folding frame.



Picture 10 - Wing lug has been assembled.

General Assembly

Place Frame On Suitable Stands:

It is recommended that you first select suitable assembly stands to suspend the tool bar at least 30" above the work-place floor. Regardless of the size of the PrepMaster to be assembled, the frame and assembled tool will be very heavy and hard to handle.



While frame is suspended, this work area will be extremely dangerous!

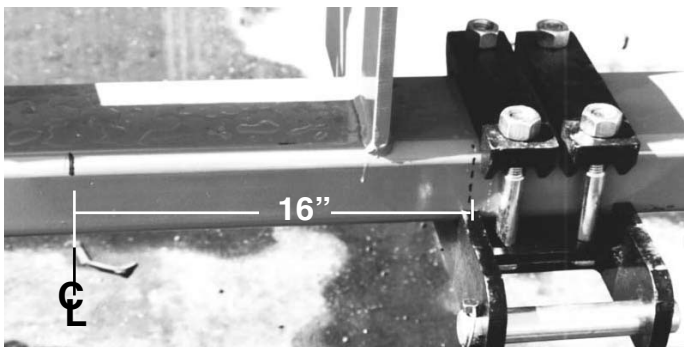
Use good judgement in selecting stable frame stands that will support the tool until assembly is complete. It is also suggested that retaining or clamping devices be used to attach the frame to stands as a safety measure until assembly is complete.

Mark Tool Bar:

Find the center of the tool bar by measuring center stringers. Mark the front tool bar at center and also 16" from either side of the center line for hitch placement. Also mark the front and rear bars for components to be placed on the top of the bed; e.g. for 38" rows place the first mark 19" from center and 38" for each mark thereafter. Add a mark 8" out from the first bed location on each side of center to accommodate side offset shanks for stalk plow assembly. See Figure B, page 11 for details.

Attach Three Point Hitch:

1.) Place lower pull points on tool bar with 1 x 6-1/2" bolts and tube cap supplied. (Picture 11) Align the center of the inside pull point plate with the mark at 16". Tighten these bolts and torque to 400 ft. lbs.



Picture 11- Place pull point on tool bar at 16" mark.

2.) Place top link on tool bar with top side up according to decal on top link. Attach with 3/4 x 6-1/2" Grade 5 bolts and tube caps provided. Tighten bolts and torque to 200 Ft. Lbs. Insert pins with proper retainers.

Front Choppers:

1.) Sub-assemble each chopper with shield and straps before you attempt to place them on the tool bar.

(Picture 12) See chopper parts diagram on page 17 for parts identification and location. Bolt flange bearings onto chopper mount shanks with mounting plates to the inside of chopper unit. Insert Chopper shaft into each bearing and tighten set collars. Leave all bolts loose to align unit. Attach shield with lower slotted straps. Bend shield to contour of chopper and attach upper shield with U-Bolts. Align shanks and shield to be square with the chopper and then tighten and torque all bolts. Bolt torque specifications may be found on page 10.



Picture 12- Sub-assemble chopper before attaching to tool bar.

After all choppers are assembled, they will be much easier to handle and mount on the tool bar.

2.) Use a forklift if possible and insert forks under the chopper bearing shaft. Gently move the chopper into position to center over the top of the bed at marked locations. Raise plates on the mount shanks to attach to the front 4 x 7 tube of the tool bar. (Picture 13) Keep attaching U-Bolts and nuts close for quick access.



Picture 13- Position chopper to mount on the front bar.

General Assembly

Be careful When handling the choppers.



Chopper assemblies are heavy, have sharp edges and potential 'pinch' areas !

Position U-bolts on the tool bar and place nuts to hold the chopper assembly in place. (Picture 14) Measure chopper mount shanks to center the unit on top of the row. Tighten and torque bolts when choppers are properly positioned. Mount all other assembled choppers on tool bar according to these instructions.



Picture 14: Place U-bolts on tool bar to mount chopper.

Front Bed Conditioners:

1.) Place 4" cap on back tool bar tube at marked location. Insert 3/4 x 6-1/2" Grade 5 bolts in cap with threads down. Raise mount bracket to line up with bolts. (Picture 15) Hold bracket in place and thread nuts onto bolts.

Tighten and torque mounting bolts. See page 18 for parts diagram.



Picture 15: Raise mount bracket and fasten nuts.

2.) Front bed conditioner is shipped as an assembly. Roll

assembled unit in position under the mount bracket. Raise arm and align center pivot with front lower mount bracket holes.



Warning! Never use your finger to align holes. Movement of heavy components can cut your finger off!

3.) Insert 3/4 x 6" Grade 5 bolt through mount and pivot. (Picture 16) Snug nylock nut but do not torque. This will allow free pivot movement of the arm.



Picture 16: Insert bolt through pivot arm.

4.) Remove top jam nuts and spring from front spring rod assembly. Raise back end of bed conditioner and block. Insert threaded rod through mount bracket spring hole and from bottom

side and align bushing with ears on pivot arm. Insert short (3/4 x 4") bolt. (Picture 17) Screw and snug 3/4" nylock jam nut on bolt. Do not overtighten nylock jam nut.



Picture 17: Insert bolt through yoke and screw jack bushing

5.) Place flat washers spring and jam nuts to complete the front screw jack assembly. (Picture 18) See Figure C, page 12 for initial operating settings for screw jacks. Note: There are two different sizes of springs for screw jacks. The large diameter coil springs go on the front screw jack. Smaller coil springs go on the rear screw jacks.



Picture 18: Complete upper spring assembly.

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6.) Place all remaining mount brackets and front bed conditioners on the frame according to steps one (1) through five (5) of front bed conditioner instructions.

Rear Rollers or optional Bed Conditioners:

Rear tool on the PrepMaster may be ordered with three different options; the standard smooth faced roller, an expanded metal roller or a rear bed conditioner with reversed spiral blades. Assembly of these rear units will be the same, with the exception of scrapers and spring rod assembly dimensions. See Figure C and parts diagram on page 18.

1.) Rear arm and roller is shipped as an assembly. Roll assembled unit in position to align pivot bushing in arm with the front upper pivot hole of the mount bracket.



Warning! Never use your finger to align holes. Movement of heavy components can cut your finger off!

2.) Insert 3/4 x 6" Grade 5 bolt through mount and pivot. (Picture 19) Snug nylock nut but do not torque. This will allow free pivot movement of the arm.



Picture 19: Insert bolt through roller arm.

3.) Remove top jam nuts and spring from rear spring rod assembly. Raise back end of arm and



Picture 20: Insert bolt through spring rod lug.

roller assembly and block into position. Insert threaded rod through spring lug on roller arm from bottom side.

Align spring rod lug with lower rear pivot hole on mount

bracket. Insert 3/4 x 6-1/2" Grade 5 bolt through. (Picture 20)

4.) Follow rear spring rod procedure on second side of roller and insert bolt through both spring rod lugs on outside of mount bracket. Screw nylock nut snug but do not torque. This will allow free pivot movement of the arm.

5.) Place flat washers, spring and jam nuts to complete the rear spring rod assemblies. (Picture 21)



Picture 21: Complete rear spring assembly.

See Figure C, page 12 for initial operating settings for rear screw jacks. Note: Smaller coil springs go on the rear screw jacks.

6.) Repeat steps one (1) through five (5) to mount remaining rear rollers on the PrepMaster.

Front Stalk Plow Shanks and Clamps.

1.) Insert square head set screws into the three locations on each clamp body. See parts diagram on page 22.

Insert shank in clamp body with foot piece facing front. (Picture 22) Tighten side set screw to keep shank in place with top of shank protruding 10" past top of clamp. Place cast clamp body on front of tool bar at marked locations using 7/8 x 9-1/2" bolts. Place tube cap on rear of bar. Tighten and torque 7/8" nuts. Note: leave only one set screw tight. When unit has been lowered off of stands, use a block to accurately set sweep height as specified in Figure C.



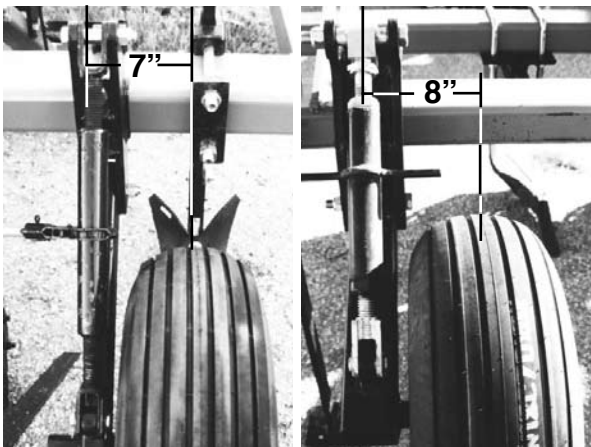
Picture 22: Stalk plow shank on front tube.

General Assembly (Optional Equipment)

Gauge Wheels:

1.) Place mount bracket on tool bar at desired location. See parts diagrams on pages 20 and 21. Use proper mounting bolts and tube cap as indicated. Tire is generally preferred to be positioned in the center of the furrow for stability. Use the dimensions below to position mount bracket properly on the tool bar. (Picture 23, Picture 24) See Figure B, page 11.

Align lower hole in mounting bracket with pivot bushing in arm and hub



assembled. Insert proper bolt and snug nylock nut. Align screw jack with upper mount hole in gauge wheel bracket and insert pin. Fasten pin with proper retainers.

3.) Raise arm and hub to attach lower screw jack with screw jack lug on arm and hub. Insert pin and fasten proper retainers.

4.) Place wheel on each hub and align wheel holes with threaded holes on hub. Screw lug bolts into hub.

5.) Torque mounting bolts and lug bolts. Snug nylock nuts but do not overtighten.

Note:

One Set of Heavy Duty gauge wheels is recommended for **four** and **six** row units.

One set of Extra Heavy Duty gauge wheels is recommended for **eight row rigid** units.

Two Sets of Heavy Duty gauge wheels are recommended for **eight row folding** units.

(One set on Center Section, one on each wing)

One Set of Heavy Duty and one set of Extra Heavy Duty gauge wheels are recommended for **twelve row folding** units.

(One set XHD on Center Section, one HD on each wing.)

Spray Nozzle Kit:

Place upper sleeve with mount bolt through hole in mount bracket. Attach whizlock nut and snug. (Picture 25)



Picture 25: Top sleeve



Picture 26: L-rod and nozzle

See parts diagram on page 22. Place L-rod through upper sleeve and tighten set screw. Place lower sleeve with pipe fittings over lower vertical L-rod. Screw plastic fitting onto lower threaded pipe fitting and tighten to seal. Do not overtighten as housing breakage could occur. Tighten fitting and set screw on sleeve when fitting is positioned for desired spray pattern. (Picture 26) Note: Spray tip and manifold are not supplied by Bigam Brothers. Please consult you local chemical dealer or spray supplier for these specific types of spray equipment.

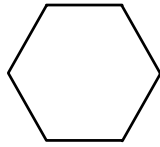
Optional Front Bedding Shanks and Busters:

Place shank and clamp assembly on the tool bar according to the instructions on page 8. Note exceptions for the set-up of rear bedding shanks are that clamp should be to the rear of the frame tube. (Picture 27) Height setting of the shanks will vary with buster selection, soil conditions and desired bed shape. Generally, busters should be set flat and set at an operating depth approximately 3 to 4" below operating depth of the choppers. Optional bedding tools may be offset to the rear (Picture 27), straight or side offset to clear frame obstructions for variable row space. See parts diagram on page 23 for a listing of available shanks.

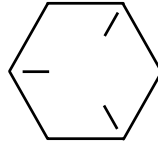


Picture 27: Optional Bedding Shanks

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GRADE 2
No Marks



GRADE 5
3 Lines on
Bolt Head

RECOMMENDED ASSEMBLY TORQUES FOR HEXAGON HEAD CAP SCREWS

Based on dry assembly. Variables such as lubrication, plating etc. may reduce the values listed below as much as 20%, and must be taken into consideration.

| | Bright Cap Screws 1018 Grade 2 | | | Heat Treated 1038 Hexagon Head Cap Screws, SAE Grade 5 | | | |
|-----------------------|--|----------------------------------|-----|--|---------------------------------|----------------------------------|-----|
| Cap Screw Diam. | Yield Strength PSI Min. | Recommended Torque (Ft. Lbs.) | | Yield Strength PSI Min. | Tensile Strength PSI Min. | Recommended Torque (Ft. Lbs.) | |
| | | UNC | UNF | | | UNC | UNF |
| 1/4" | 58,000 | 6 | 7 | 90,000 | 120,000 | 11 | 13 |
| 5/16" | 58,000 | 13 | 14 | 90,000 | 120,000 | 21 | 23 |
| 3/8" | 58,000 | 23 | 26 | 90,000 | 120,000 | 38 | 40 |
| 7/16" | 58,000 | 37 | 41 | 90,000 | 120,000 | 55 | 60 |
| 1/2" | 58,000 | 57 | 64 | 90,000 | 120,000 | 85 | 95 |
| 5/8" | 55,000 | 111 | 128 | 90,000 | 120,000 | 175 | 210 |
| 3/4" | 55,000 | 200 | 223 | 90,000 | 120,000 | 300 | 330 |
| 7/8" | 55,000 | 315 | 340 | 81,000 | 115,000 | 450 | 490 |
| 1" | 50,000 | 400 | 460 | 81,000 | 115,000 | 680 | 715 |
| 1-1/8" | 50,000 | 570 | 635 | 77,000 | 105,000 | 885 | 990 |

General Formula for calculating Torque is as follows:

Torque in Inch Lbs. = .2 x Nominal Diameter of Screw x Load in Lbs., where Load = 80% of Yield Strength, expressed in Lbs., not pounds per square inch.

The tension induced in a cap screw may be checked by measuring overall length before torquing and then under torque load. The screw stretches .001" per inch of screw length for each 30,000# P.S.I. induced tension. Applies only to loads below the yield point.

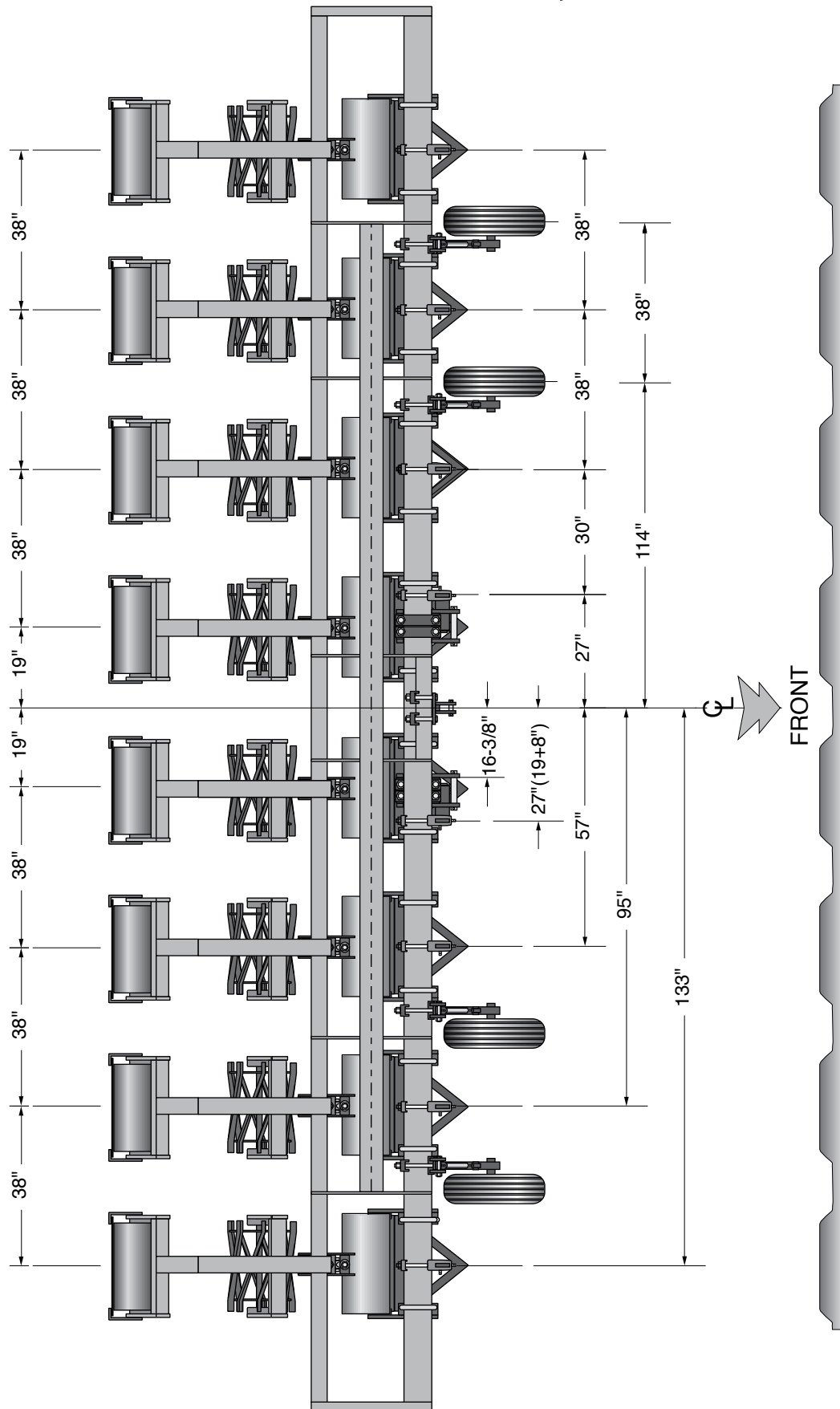


Figure B: Set-Up Diagram (Top View) For Typical PrepMaster; 38" Row Space
 (Dimensions indicate front and rear tool bar tube markings for component placement.)

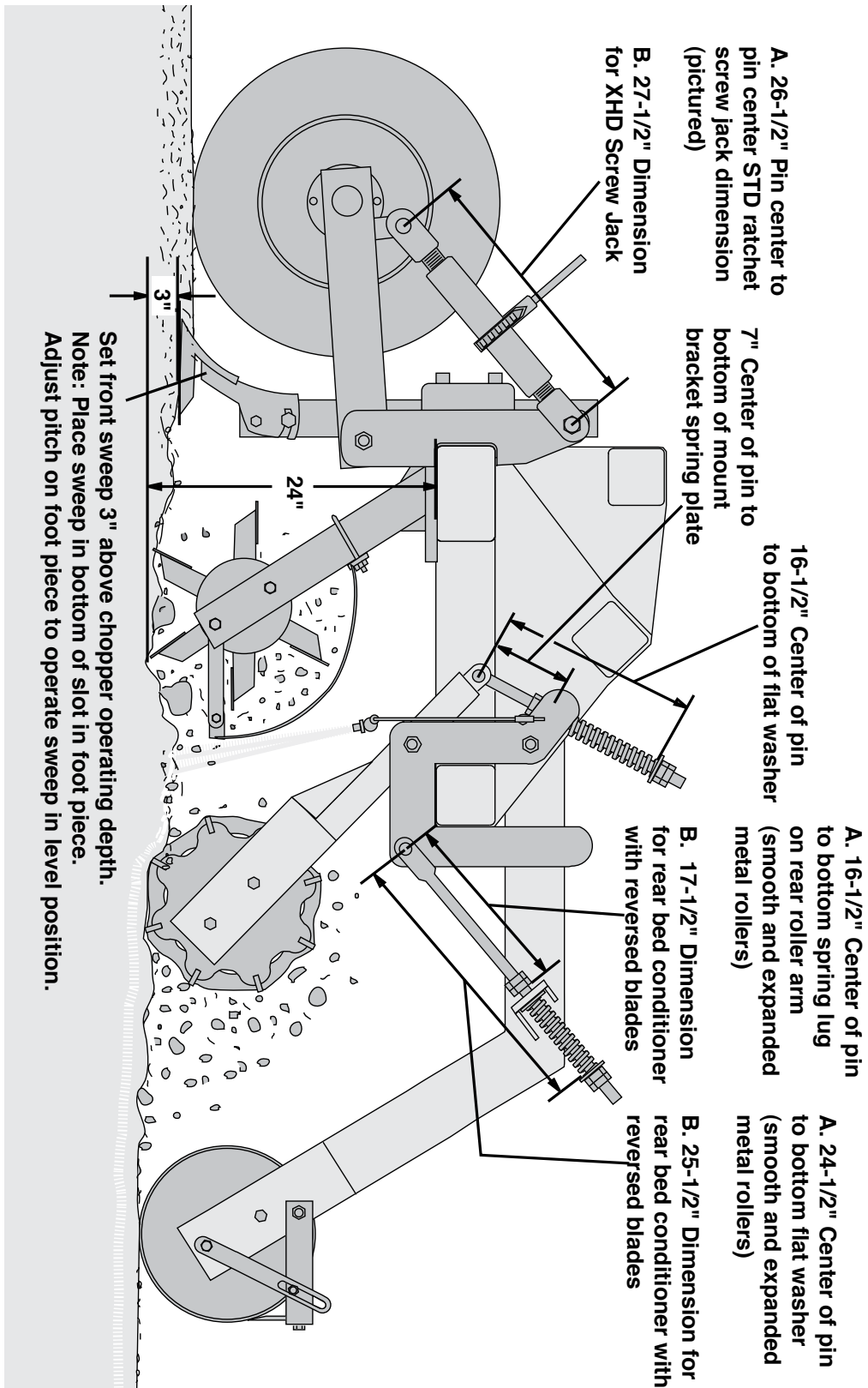




Figure C: Set-Up Diagram (Side View) with Typical Component Adjustment Dimensions
(Dimensions indicate components set for field operation based on average field conditions)

Guidelines for Operation

Attaching the Tractor to the PrepMaster

Choosing the Proper Tractor:

1. Check the general specifications of PrepMaster whole goods on page 3 of this manual. Check the weight of the unit to operate and check the lift capacity of the tractor that you intend to attach the PrepMaster to. Keep in mind that listed **weights do not include accessories** such as gauge wheels, additional bedding tools, rear bed conditioners or sweeps. **These units are heavy.** Make certain the selected tractor has ample capacity to pick up and transport the unit that you intend to operate.
2. Insure that both right and left lift arms are identical in length and tool bar is level (right to left). They must be equal to achieve uniform operating depth and transport clearance.
3. The three-point lift linkage should be locked into the fixed position, not the float position.
4. Sway blocks or stabilizing chains should be adjusted to minimize lateral movement.
5. Check the tractor for sufficient front end weight to permit constant positive steering at all times.
6.  **CAUTION** 

NEVER STAND BETWEEN TRACTOR AND PrepMaster WITH THE TRACTOR ENGINE RUNNING.

7. The three point hitch has been specifically designed to be compatible with Cat. III N and Cat. III Wide quick hitches. (Cat II for four and six row models) If pins do not line up with quick hitch stop and review page 6 of this manual. Make sure the top side of the top link is positioned correctly and check position of pull points on the tool bar.

A. Tractors Equipped with Quick Hitches:


1. Attach quick hitch to the PrepMaster and make sure lower pin locks are secured.
2. Raise the PrepMaster slightly to permit parking stands to be raised (if equipped).
3. When disconnecting the PrepMaster utilize parking stands (if equipped) or blocks to allow the front of the PrepMaster to tilted slightly forward. This will permit easier disconnection and reattaching.


B. Tractors without Quick Hitch:


1. Attach lower lift arms of the tractor to the PrepMaster with appropriate pins which match the lower lift arms of the tractor.
2. Attach top link after connecting lower lift arms. Raise PrepMaster slightly to lift parking stands into operating position (if equipped).


Operation Instructions: Stack Fold Tool Bars

Safety Warnings:

 **Hydraulic fluid is under high pressure. Be careful when you are close to cylinders, hoses and fittings. Replace or repair leaking or damaged hydraulic components.**

 **Never use your hands to locate a hydraulic leak. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate the skin.**


 **Always lower the unit to the ground before performing maintenance or inspections.**

 **Do not work on components on a raised wing. Never stand under a wing. Stay clear of the machine when raising or lowering wings.**

Initial Operation:

- 1.) Place tractor remote fluid volume on the maximum (rabbit) setting. Each cylinder is equipped with restrictors to maintain a safe, stable wing fold speed. **Do not remove restrictors.** Regulate fluid volume to speed up or slow down movement.
- 2.) Never fold or unfold the unit while transporting. Lower the unit to operating position so the ground may support the structure when raising or lowering each wing. Better stability is achieved if you engage both wings at the same time.
- 3.) When operating the unit, place both tractor remote levers controlling tool bar cylinders to the float position. This will protect cylinders and folding structure during operation.

After Operation:

 **Never park the unit with the wings in the raised position.** Lower each wing and put the remotes in the float position before detaching hoses and hitch from the tractor.

Field Use and Adjustments:
NEVER ALLOW ANYONE
TO RIDE ON THIS EQUIPMENT
DURING OPERATION.

TO AVOID INJURY, DO NOT
CLEAN, ADJUST OR SERVICE
WHEN MACHINE IS IN MOTION

1.) Level the frame front to back by lengthening or shortening the top link of the tractor.

2.) Set the front stalk sweep to run at half the chopper operating depth, i.e. if chopper is operating at 4" depth, set front sweep to run at 2" depth. Set the PrepMaster on a level surface and use blocks to accurately set sweep height. See Figure C, page 12 for initial settings.

Place sweep in the bottom of the foot piece slot. Sweep mounted in the middle or upper portion of slot will leave an inconsistent indentation (divot) in the center of the seedbed. In field conditions with tall, peaked beds it may be necessary to adjust sweep nose down in order to move enough dirt to flatten the seedbed.

3.) Use jam nuts to lock top and bottom of spring movement on front bed conditioner. When unit is operating in the field, both front and rear spring jacks should have

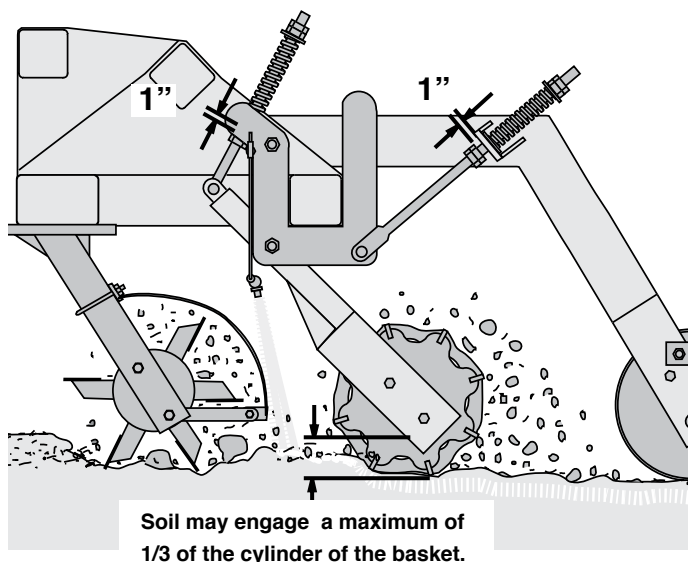


Figure D: Center basket and spring rod adjustment.

approximately 1" of play on the lower side of the spring. (Figure D) As a general rule one third of the bed conditioner cylinder should engage the soil on top of the bed. Excessive spring pressure on front bed conditioner or rear roller can result in the basket or roller 'balling up' with moist soil. Excessive pressure on front basket or rear roller can hold the unit out of the ground and act as an independent gauge wheel. Soil contact and motion will be adversely affected.

4.) Gauge wheels may be set to determine the finished height of the seedbed. Initial setting in Figure C, page 12 will produce a flat bed with a small furrow. Raise gauge wheels (increase screw jack length) for a taller bed shape. Lower gauge wheels (reduce screw jack length) for a shorter, flatter bed.

5.) Maximum speed is 10 mph. Optimum operating speed is 5+ miles per hour. Lower speeds generally result in a less aggressive soil engagement and incorporation. Producers have expressed a preference to operate the PrepMaster at the same speed as the planter, with both units running at a consistent interval. This interval varies with soil conditions and user preference. The most common intervals put the PrepMaster operating one round (12 -24 rows) to five hours in front of the planter. Longer time ranges allow top crust to dry and act as an abrasive to keep double disc openers clean on the subsequent planting operation in moist soils.

6.) Always raise the implement completely out of the ground when backing up or making sharp turns in field operation. This will prevent damage to components such as roller arms.

7.) Two essential elements are critical to good chemical incorporation on a seedbed. Loose soil to be worked on a seedbed as flat as possible will allow incorporation at a consistent 2" to 3" depth, depending on soil conditions and depth setting of the PrepMaster. **Consult with your local chemical dealer for recommendations concerning herbicides or other chemicals, application rates and specific application equipment.**

Ag chemicals can be dangerous.
Always follow safety precautions of the
chemical manufacturer and use the
recommended safety equipment.

Maintenance Instructions

Periodic maintenance and inspections will pay dividends.

Bolts:

1.) Check all bolts after one hour of service. Pay particular attention to mounting bolts for the hitch, chopper and combination basket/roller unit. Check pivot bolts on basket and roller unit as well as shield and bearing mount bolts. Check that all retainers on pins are properly attached. Always tighten loose bolts. See bolt torque chart on page 10. Replace worn, broken or missing fasteners.

Lubrication:

Bearings: Visually inspect each grease zerk to make sure fitting is tight before beginning operation.

Do not over grease bearings on the unit. Use a hand grease gun. Failure to follow these procedures could result in bearing failures. As a general rule, grease each bearing weekly. Two greasable bearings are on each chopper, center bed conditioner and rear roller for each row. (Picture 27)

Gauge Wheel

Hubs: Clean and repack bearings annually.

Tires:

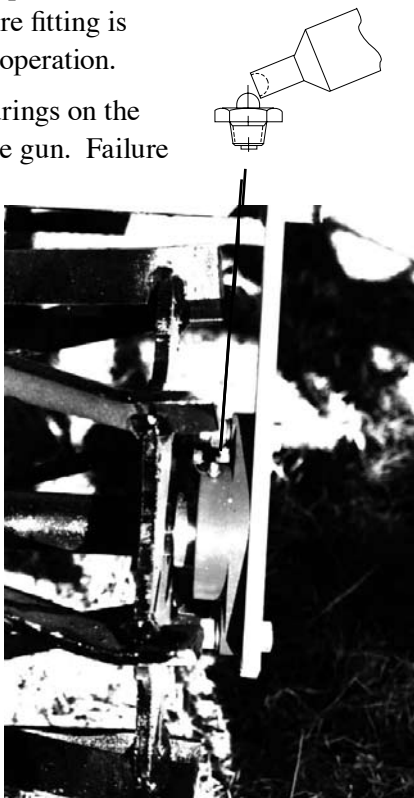
Maintain gauge wheel tire pressure at 30-35 PSI.

Sweeps:

Inspect each sweep daily. Replace worn or broken sweeps.

Scrapers:

Inspect scrapers daily. Keep scrapers adjusted to keep rear roller clean. Replace scraper blade when blade is worn and will not maintain contact with roller.



Picture 27: Grease zerk on flange bearing

Storage Information (Direct Fold Tool Bars)



Never park the unit with the wings in the elevated position.



Stay clear of folding wings when being raised or lowered.



Raised wings can contact electric utility lines and overhead obstructions. Severe shock, injury or death can result. Drive carefully. Measure overall transport height and assure clearance.

Recommended Storage Procedure:

- 1.) After field use, find a suitable location for storage (Clear and reasonably level).
- 2.) Extend cylinder of each wing to lower tool bar to flat position.
- 3.) Place tractor remote lever to the float position to relieve pressure from the cylinder.
- 4.) Remove the cylinder clevis pin from each of the wings. Keep 1" spacer flat washers on the pin for storage.
- 5.) Retract cylinder on each wing. This will protect the chrome finish on the rod of the cylinder for extended storage periods.
- 6.) Before disconnecting hydraulic lines, shut off hydraulic supply and relieve all hydraulic pressure. Remove quick tips from the remote plug sockets.

Alternate Temporary Storage Procedure:

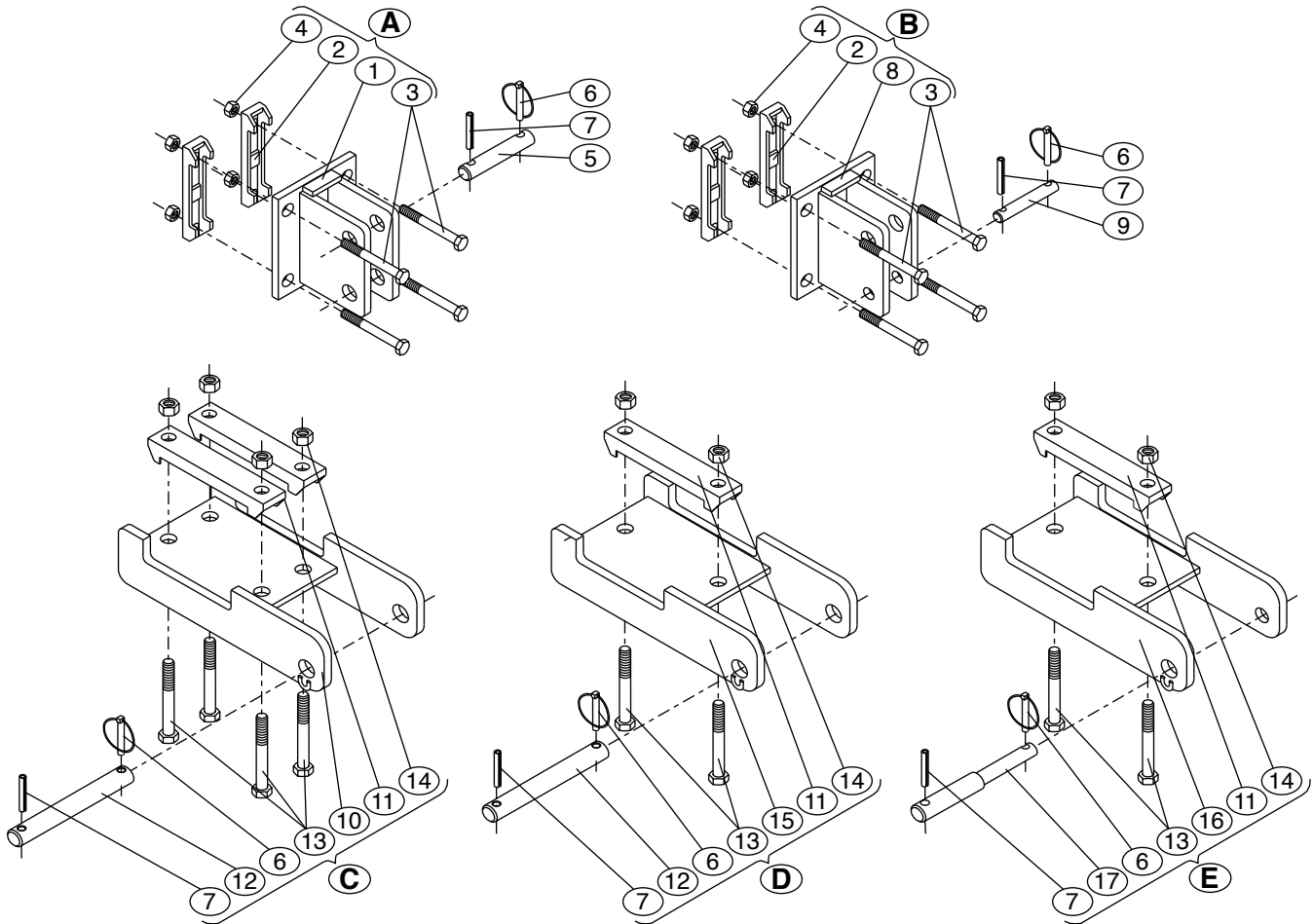
- 1.) Find a suitable location for storage (Clear and reasonably level).
- 2.) Extend cylinder of each wing to lower tool bar to flat position.
- 3.) Before disconnecting hydraulic lines, shut off hydraulic supply and relieve all hydraulic pressure. Remove quick tips from the remote plug sockets.



These procedures must be explained to and followed by end operators to avoid injury and equipment damage.

BIGHAM BROTHERS, INC.

Parts Diagram/Parts List (Three Point Hitch)



804-743 Hitch, 4x7 Bar (Cat III Wide)

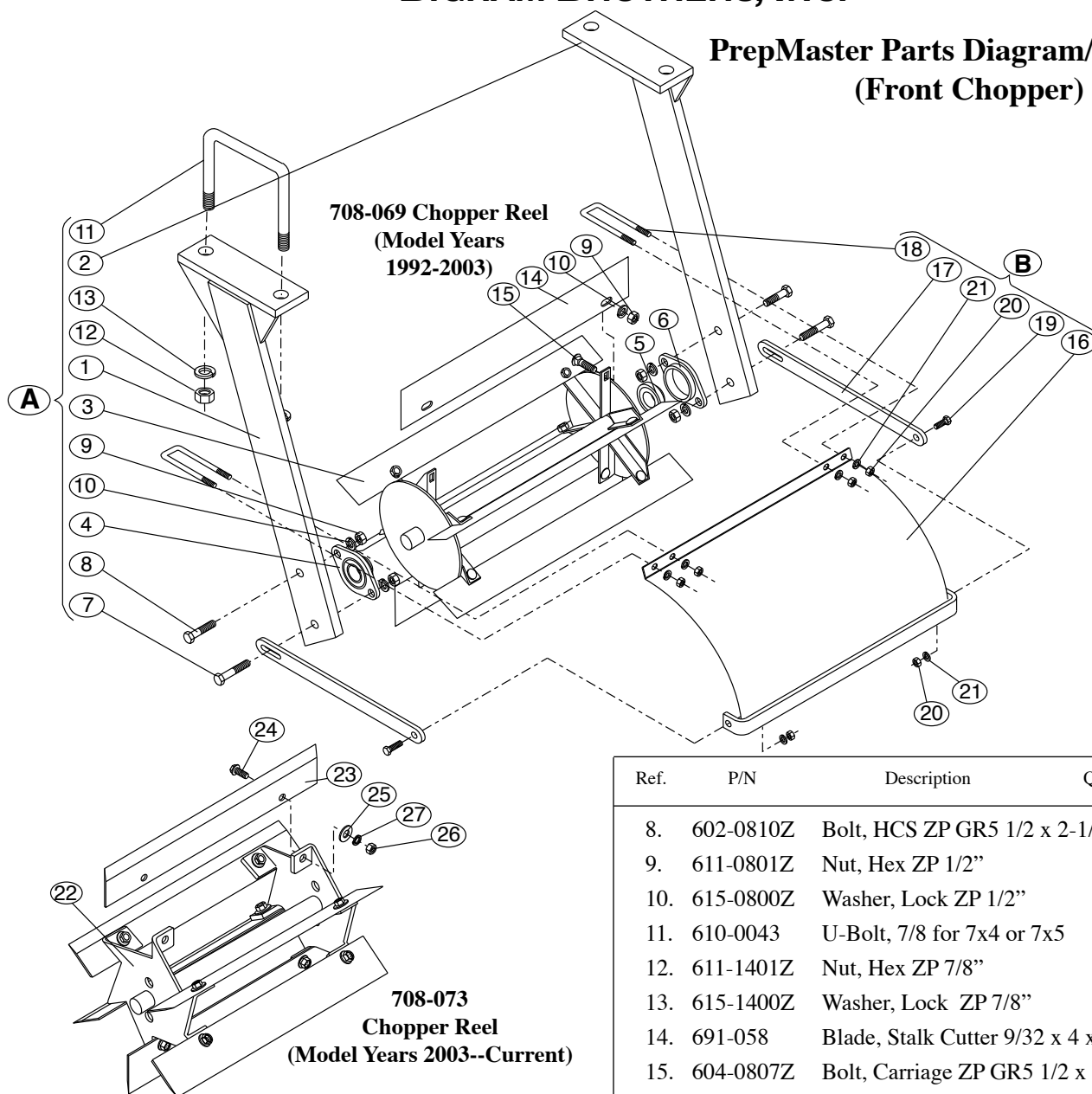
804-743D Hitch, 4x7 (Cat III) Double Cap

804-740 Hitch, 4x7 Bar (Comb II & III)

| Ref. | P/N | Description | Qty. Req. Per Hitch | Ref. | P/N | Description | Qty. Req. Per Hitch |
|-----------|----------------|--|---------------------|-----------|-----------------|---|---------------------|
| A | 804-301 | Top Link Assy Cat III | | 11. | 628-308 | Cap, 7" Bar 1" Bolt Hole (Cast) | 4 |
| 1. | 704-301 | Bracket, Top Link Cat. III | 1 | 12. | 617-196 | Pin, Clevis Cat III Wide P.P. | 2 |
| 2. | 628-400 | Cap, 4" 7/8 & 1" Bolt Holes | 2 | 13. | 601-1626Z | Bolt, HCS ZP GR2 1 x 6-1/2" | 8 |
| 3. | 602-1426Z | Bolt, HCS ZP GR2 7/8x6-1/2" | 4 | 14. | 611-1601Z | Nut, Hex ZP 1" | 8 |
| 4. | 611-1401Z | Nut, Hex ZP 7/8" | 4 | D. | 804-719W | Pull Pt. Assy 4x7 Cat.III Wide | |
| 5. | 617-190 | Pin, Clevis Cat III Top Link | 1 | 15. | 704-727 | Bkt., Pull Pt 4x7 (Cat. III) | 2 |
| 6. | 617-105 | Klik Pin, 7/16 x 2" | 1 | E. | 804-717 | Pull Pt Assy, 4x7 LH (Comb II & III) | |
| 7. | 617-053 | Pin, Roll 7/16 x 2-1/4" | 1 | | 804-718 | Pull Pt Assy, 4x7 RH (Comb II & III) | |
| B. | 804-300 | Top Link Assy, Comb. II & III | | | | Pictured | |
| 8. | 704-300 | Bracket, Top Link Comb.II & III | 1 | 16. | 704-742 | Bkt., Pull Point 4x7 Comb LH | 2 |
| 9. | 617-164 | Pin, Clevis Cat II Top Link | 1 | | 704-743 | Bkt., Pull Point 4x7 Comb RH | 2 |
| C. | 804-710 | Pull Pt. Assy 4x7 IIW Dbl. Cap | | 17. | 617-200 | Pin, Clevis Comb.II & III Z.P. | 2 |
| 10. | 704-727D | Bkt, Pull Pt. 7"Cat.III Double Cap | 2 | | | | |

BIGHAM BROTHERS, INC.

PrepMaster Parts Diagram/Parts List (Front Chopper)

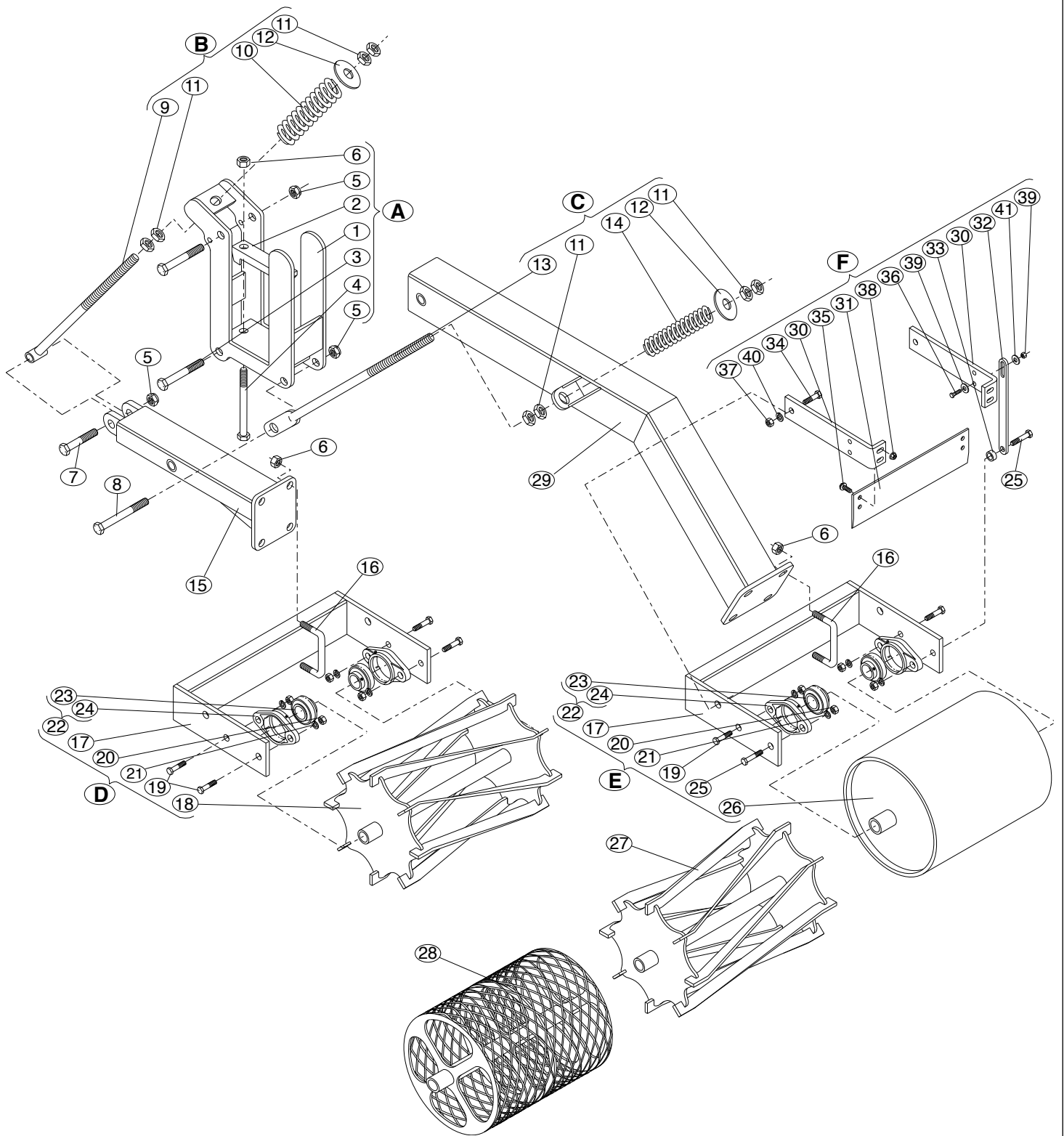


| Ref. | P/N | Description | Qty Req.Per Row |
|-----------|----------------|------------------------------------|-----------------|
| 8. | 602-0810Z | Bolt, HCS ZP GR5 1/2 x 2-1/2" | 2 |
| 9. | 611-0801Z | Nut, Hex ZP 1/2" | 4 |
| 10. | 615-0800Z | Washer, Lock ZP 1/2" | 4 |
| 11. | 610-0043 | U-Bolt, 7/8 for 7x4 or 7x5 | 2 |
| 12. | 611-1401Z | Nut, Hex ZP 7/8" | 4 |
| 13. | 615-1400Z | Washer, Lock ZP 7/8" | 4 |
| 14. | 691-058 | Blade, Stalk Cutter 9/32 x 4 x 24" | - |
| 15. | 604-0807Z | Bolt, Carriage ZP GR5 1/2 x 1-3/4" | - |
| B. | 815-815 | Shield Assy., 24" Chopper | |
| 16. | 715-805 | Shield, Chopper .20ga.x29" | 1 |
| 17. | 686-985 | Mount Plate., Adj. Chopper | 2 |
| 18. | 610-0004 | U-Bolt, 3/8 Sq. Bend for 1-1/4" | 2 |
| 19. | 602-0604Z | Bolt, HCS ZP GR5 3/8 x 1" | 2 |
| 20. | 611-0601Z | Nut, Hex ZP 3/8" | 6 |
| 21. | 615-0600Z | Washer, Lock ZP 3/8" | 6 |
| 22. | 708-073 | Chopper Reel, 6 Blade 24" | 1 |
| 23. | 691-067 | Blade, Chopper Reel 24" | 6 |
| 24. | 603-0705Z | Bolt, Whizlock 7/16"x1-1/2" | 12 |
| 25. | 616-0700Z | Wshr, Flat ZP 7/16" | 12 |
| 26. | 611-0701Z | Nut, Hex ZP 7/16" | 12 |
| 27. | 615-0700Z | Wshr, Lock ZP 7/16" | 12 |

| Ref. | P/N | Description | Qty Req.Per Row |
|-----------|----------------|--|-----------------|
| A. | 750-027 | Chopper Assy., 24" Rigid 4x7" Mount (Less Shield) | |
| 1. | 685-250 | Mount Bkt., Chopper Brg. LH | 1 |
| 2. | 685-251 | Mount Bkt., Chopper Brg. RH | 1 |
| 3. | 708-069 | Chopper Reel, 6 Blade 24" | 1 |
| 4. | 622-085 | Bearing Assy., 1-1/2" Flange (Chopper) | 2 |
| 5. | 622-086 | Bearing Filler, 1-1/2" Flange (Chopper) | - |
| 6. | 622-090 | Housing, 2 Hole Flange (Chopper) | - |
| 7. | 602-0811Z | Bolt, HCS ZP GR5 1/2 x 2-3/4" | 2 |

BIGHAM BROTHERS, INC.

PrepMaster Parts Diagram (Bed Conditioner and Rear Roller)



BIGHAM BROTHERS, INC.

PrepMaster Parts List

(Bed Conditioner and Rear Roller)

886-300

Bed Cond./Faced Roller Assy., 4x4" Mount

886-305

Bed Cond./Rear Basket w/Rev. Blades, 4x4" Mt.

886-310

Bed Cond./Exp. Metal Roller Assy., 4x4" Mount

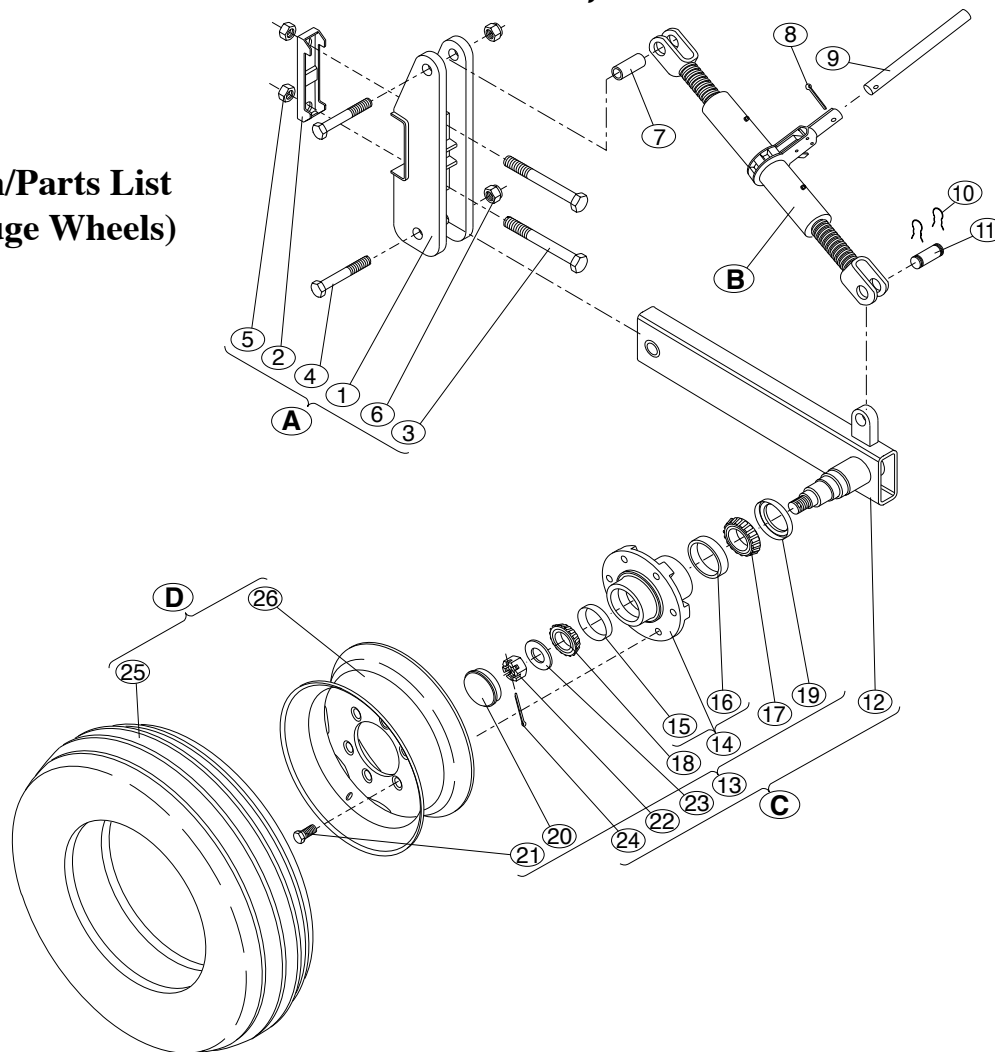
| Ref. | P/N | Description | Qty Req.* | Ref. | P/N | Description | Qty Req.* |
|------------|-----------------|--|-----------|------------|----------------|--|-----------|
| A. | 785-245 | Mount Assy., 4x4" Cond./Roller | 1 | E. | 785-607 | Yoke & 21" Faced Roller Assy. | 1 |
| 1. | 685-245 | Mount Bkt., 4x4" Conditioner/Roller | 1 | | 785-606 | Yoke/Basket Assy. w/Reverse Blade | 1 |
| 2. | 628-200 | Cap, 4" 3/4 Bolt Holes | 1 | | 785-608 | Yoke/ 21" Exp. Metal Roller Assy. | 1 |
| 3. | 602-1224Z | Bolt,HCS ZP GR5 3/4x6" | 2 | 17. | 685-321 | Yoke Weldment, 21" Bed Cond. | 1 |
| 4. | 602-1226Z | Bolt,HCS ZP GR5 3/4x6-1/2" | 3 | 19. | 602-0808Z | Bolt, HCS ZP GR5 1/2x2" | 2 |
| 5. | 613-1215J | Nut, Hex Nylock Jam ZP 3/4" | 2 | 20. | 611-0801Z | Nut, Hex Zp 1/2" | 4 |
| 6. | 611-1201Z | Nut, Hex ZP 3/4" | 2 | 21. | 615-0800Z | Washer, Lock ZP 1/2" | 4 |
| 7. | 602-1216Z | Bolt,HCS ZP GR5 3/4x4" | 1 | 22. | 622-084 | Bearing Assy. 1-1/2" Flange | 2 |
| 8. | 602-1228Z | Bolt,HCS ZP GR5 3/4x7" | 1 | 23. | 622-087 | Bearing Filler,1-1/2" PrepMaster | - |
| | | | | 24. | 622-091 | Housing, 2 Hole Flange | - |
| B. | 785-230 | Screw Jack Assy., Front Bed Cond. | 1 | 25. | 602-0810Z | Bolt, HCS ZP GR5 1/2x2-1/2" | 2 |
| 9. | 685-230 | Threaded Rod W/Bushing (19") | 1 | 26. | 686-210 | Pipe Roller,12-3/4"O.D.x19-3/4" | 1 |
| 10. | 633-030 | Spring, Stab./PrepMaster (Front) | 1 | 27. | 685-205R | Basket Wlmt., 8 Blade 21" Wide | 1 |
| 11. | 614-1601Z | Nut, Hex Jam ZP 1" | 4 | | | w/Reverse Blades | |
| 12. | 616-1605Z | Washer, Flat 1" S.A.E. | 1 | 28. | 686-212 | Exp. Metal Roller,12-3/4"x19-3/4" | 1 |
| | | | | | | | |
| C. | 785-235 | Screw Jack Assy., Rear Roller | 2 | 29. | 685-303 | Arm Weldment 4x4,Roller/Cond. | 1 |
| 11. | 614-1601Z | Nut, Hex Jam ZP 1" | 4 | | | | |
| 12. | 616-1605Z | Washer, Flat 1" S.A.E. | 1 | F. | 886-985 | Scraper Assy., 21" Rear Roller | |
| 13. | 685-236 | Threaded Rod W/Lug (31") | 1 | 30. | 686-983 | Bracket, Univ. Scraper (21" Roller) | 2 |
| 14. | 633-025 | Spring, PrepMaster (Rear) | 1 | 31. | 686-987 | Scraper Blade,9/32x4x22-1/2" | 1 |
| | | | | 32. | 686-985 | Mount Plate., Lower Scraper Adj. | 2 |
| 15. | 685-302 | Arm Weldment 2x4",Bed Cond. | 1 | 33. | 636-869 | Bushing,.84x.546x.5 Scraper Mt. | 2 |
| 16. | 610-0037 | U-Bolt, 3/4 For 4x2 GR5 | 4 | 34. | 602-1008Z | Bolt,HCS ZP GR5 5/8 x 2" | 2 |
| | | | | 35. | 603-0705Z | Whizlock Bolt ZP 7/16x1-1/2" | 4 |
| D. | 785-605 | Yoke & 21" Basket Assy. | 1 | 36. | 602-0606Z | Bolt,HCS ZP GR5 3/8x1-1/2" | 2 |
| 17. | 685-321 | Yoke Weldment, 21" Bed Cond. | 1 | 37. | 611-1001Z | Nut, Hex ZP 5/8" | 2 |
| 18. | 685-205 | Basket Weldment, 21"Wide/16" Dia. | 1 | 38. | 614-0701Z | Nut, Hex Whizlock ZP 7/16" | 4 |
| 19. | 602-0808Z | Bolt, HCS ZP GR5 1/2x2" | 4 | 39. | 611-0601Z | Nut, Hex ZP 3/8" | 2 |
| 20. | 611-0801Z | Nut, Hex Zp 1/2" | 4 | 40. | 615-1000Z | Washer, Lock ZP 5/8" | 2 |
| 21. | 615-0800Z | Washer, Lock ZP 1/2" | 4 | 41. | 616-0600Z | Washer, Flat ZP 3/8" | 2 |
| 22. | 622-084 | Bearing Assy. 1-1/2" Flange | 2 | | | | |
| 23. | 622-087 | Bearing Filler,1-1/2" PrepMaster | - | | | | |
| 24. | 622-091 | Housing, 2 Hole Flange | - | | | | |

*Note: Quantities listed in bold type are assembly quantities required per row.

Quantities listed in standard type are part quantities required per assembly.

BIGHAM BROTHERS, INC.

Parts Diagram/Parts List (Standard Gauge Wheels)

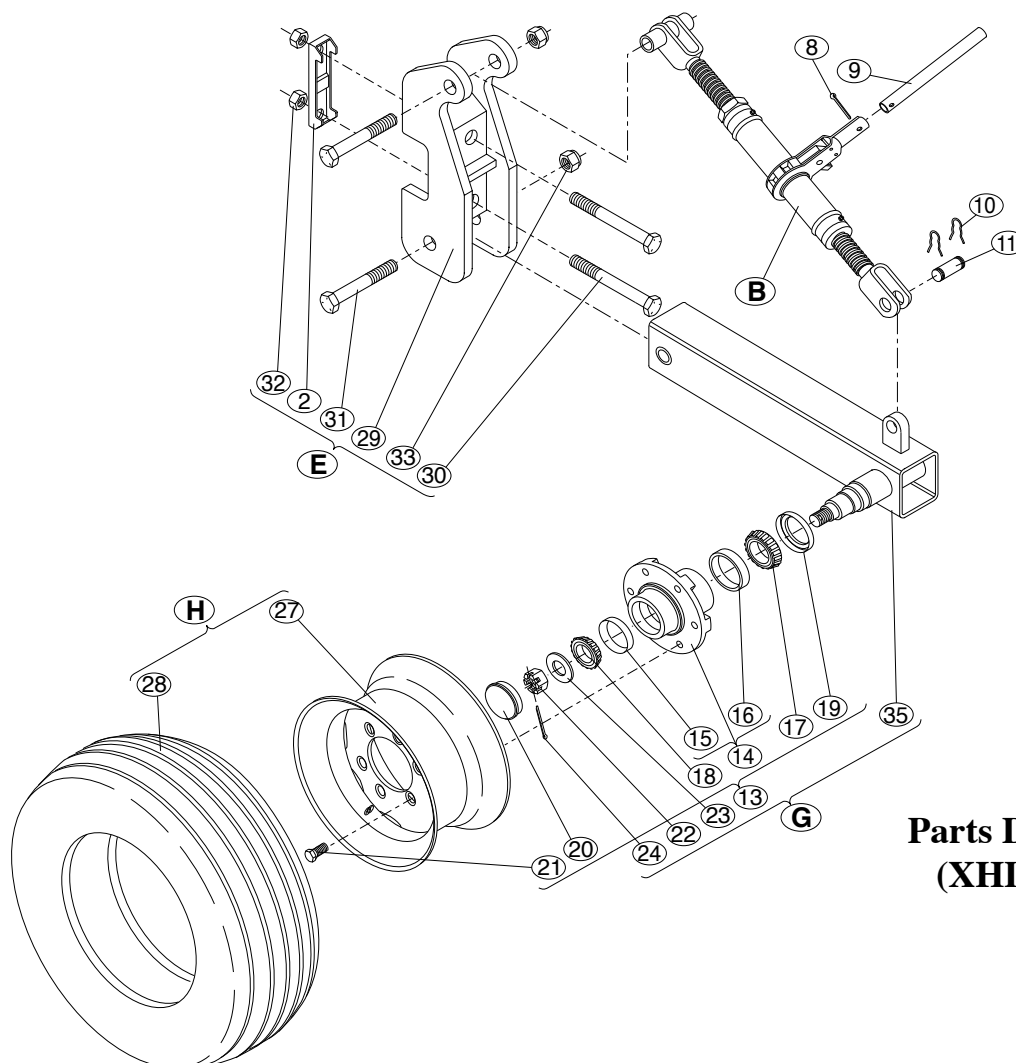


805-478

GW Hvy. Duty W/9.5L x 15" Tires 4x7"

| Ref. | P/N | Description | Qty Req.Per Set | Ref. | P/N | Description | Qty Req.Per Set |
|-----------|-----------------|--|-----------------|------|----------|-------------------------------|-----------------|
| A. | 805-106 | Mount Assy., 4 X 7" | - | 8. | 617-026 | Pin, Cotter 1/4 x 2" | 2 |
| B. | 705-080 | Screw Jack (Ratchet) | 2 | 9. | 617-110 | Tube, 7/8 x 12" (Jack Handle) | 2 |
| C. | 705-017L | Shank/Hub Assy. LH | 1 | 10. | 617-160 | Hairpin, 3/16 x 2" 1" I.D. | 4 |
| | 705-017R | Shank/Hub Assy. RH (Pictured) | 1 | 11. | 617-160 | Pin, Clevis ZP 1 x 2" USBL | 2 |
| D. | 705-001 | Wheel & Tire 6 Hole (7.60 X 15) | 2 | 12. | 705-016L | Shank/Spindle, LH | |
| 1. | 705-047 | Mount Bkt., 4" | 2 | | 705-016R | Shank/Spindle, RH (Pictured) | |
| 2. | 628-400 | Cap, Cast 4" HD | 2 | 13. | 627-160 | Hub Assy., 6 Hole Q888 | |
| 3. | 609-1438Z | Bolt, HMB ZP 7/8 x 9-1/2" | 4 | 14. | 627-159 | Hub/Cups., 6 Hole Q888 | |
| 4. | 601-1218Z | Bolt, HCS ZP GR2 3/4 x 4-1/2" | 4 | 15. | 622-006 | Cup, 67010 | |
| 5. | 611-1401Z | Nut, Hex ZP 7/8" | 4 | 16. | 622-008 | Cup, 69310 | |
| 6. | 613-1200Z | Nut, Hex Nylock ZP 3/4" | 4 | 17. | 622-009 | Bearing Cone, 69349 | |
| 7. | 617-250 | Bushing, Clevis Std. G.W. | 2 | 18. | 622-007 | Bearing Cone, 67048 | |

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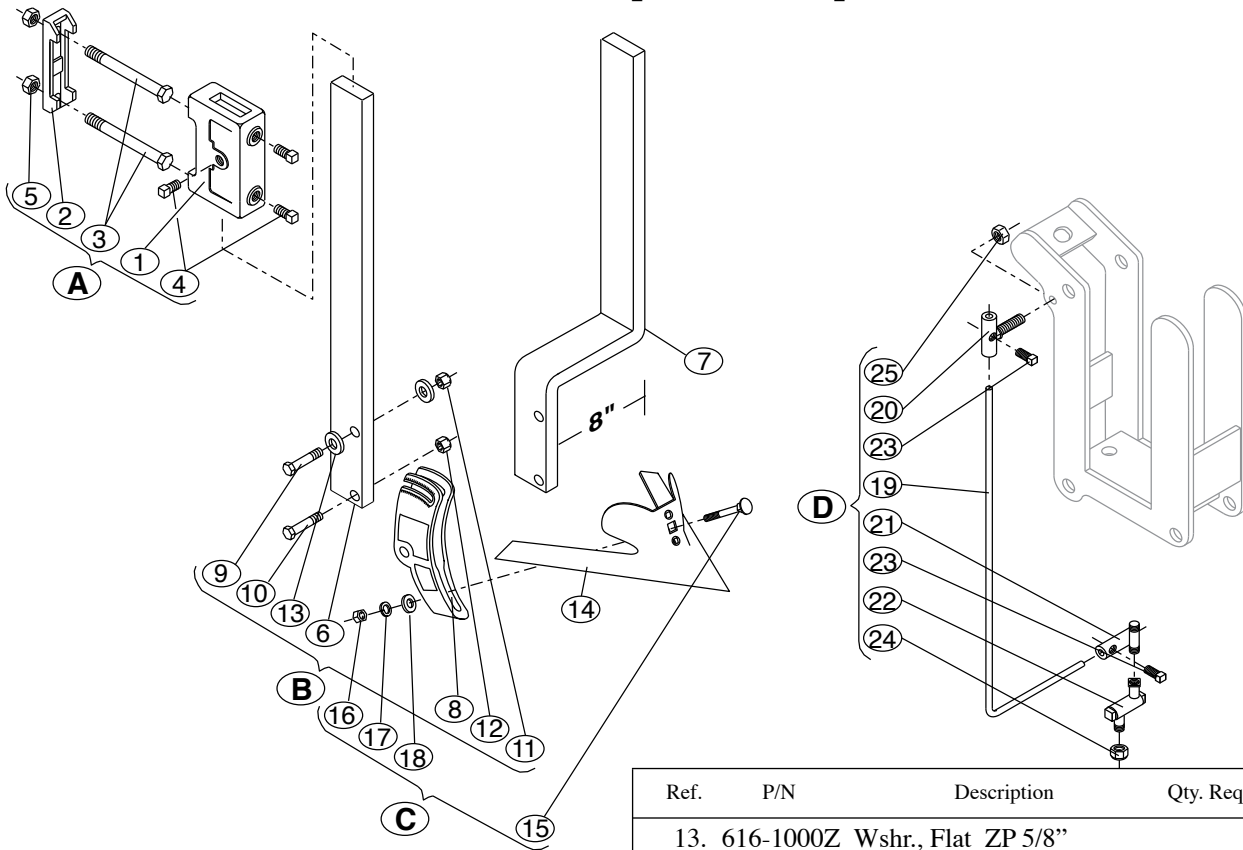
**Parts Diagram/Parts List
(XHD Gauge Wheels)**

805-477 GW Extra HD W/9.5L x 15" Tires 4x7"

| Ref. | P/N | Description | Qty Req.Per Set | Ref. | P/N | Description | Qty Req.Per Set |
|-----------|-----------------|--|-----------------|------|-----------|----------------------------------|-----------------|
| F. | 805-147 | Mount Assy., XHD 4 x 7" | - | 26. | 627-456 | Wheel, 6 Hole (15 x 5KB) | 2 |
| F. | 705-085 | Screw Jack, XHD | 2 | 27. | 627-460 | Wheel, 6 Hole (15 x 8LB) | 2 |
| G. | 705-039L | Shank/Hub Assy., XHD LH | 1 | 28. | 627-569 | Tire, 9.5L x 15" | |
| | 705-039R | Shank/Hub Assy., XHD RH (Pict.) | 1 | 29. | 705-060 | Mount Bkt., 4" XHD | 2 |
| H. | 705-002 | Wheel & Tire 6 Hole (9.5L x 15) | 2 | 30. | 609-1640Z | Bolt, HMB ZP 1 x 10" | 4 |
| 19. | 623-002 | Seal, Q888 Hub (16289) | | 31. | 602-1626Z | Bolt, HCS ZP GR5 1 x 6-1/2" | 4 |
| 20. | 627-560 | Cap, Dirt Q888 Hub | | 32. | 611-1601Z | Nut, Hex ZP 1" | 4 |
| 21. | 607-0805Z | Bolt, Lug ZP 1/2 x 1-1/4" | | 33. | 614-1601Z | Nut, Hex Nylock ZP 1" | 4 |
| 22. | 614-1407 | Nut, Hex Slotted 7/8" N.F. | | 34. | 617-010 | Zerk, 1/4" Drive | 2 |
| 23. | 616-1400 | Bushing, Mach. 7/8" x 14 Ga. | | 35. | 705-018L | Shank/Spindle, XHD LH | |
| 24. | 617-020 | Pin, Cotter 5/32 x 1-1/2" | | | 705-018R | Shank/Spindle, XHD RH (Pictured) | |
| 25. | 627-750 | Tire, 7.60 x 15" | | | | | |

BIGHAM BROTHERS, INC.

Parts Diagram/Parts List (Front Stalk Plow Shank, Optional Sweep and Nozzle Kit)



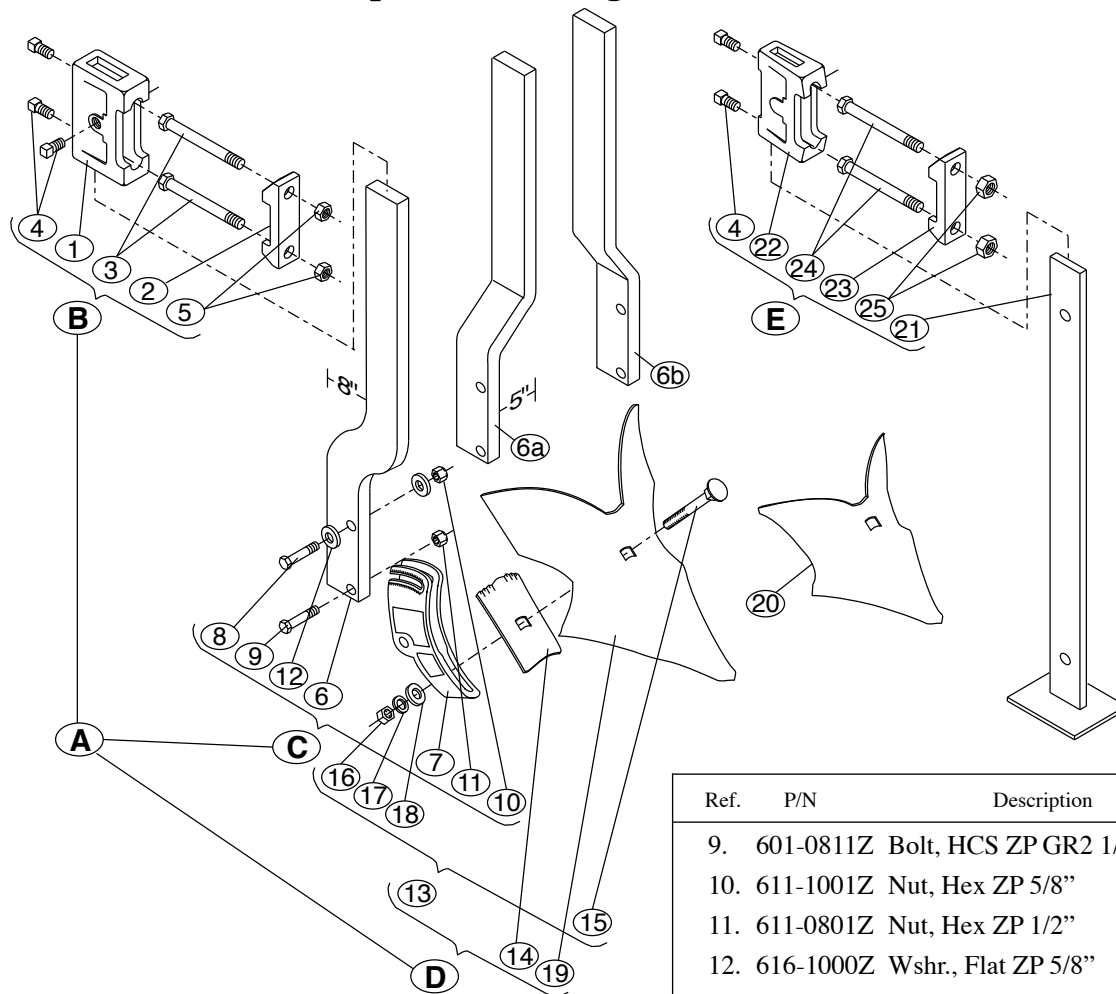
| Ref. | P/N | Description | Qty. Req. Per Row |
|-----------|----------------|---|-------------------|
| A. | 806-473 | Clamp, 4x7 For 1x3 Shank | |
| 1. | 628-700 | Body, Clamp 4" 1x3 Shank | 1 |
| 2. | 628-400 | Cap, 4" 7/8 & 1" Bolt Holes | 1 |
| 3. | 609-1438Z | Bolt, HMB ZP 7/8 x 9-1/2" | 2 |
| 4. | 606-1006Z | Set Screw, Sqr Hd. ZP 5/8 x 1-1/2" | 3 |
| 5. | 611-1401Z | Nut, Hex ZP 7/8" | 2 |
| B. | 705-300 | Shank Assy., 1x3x34" Alloy | |
| | 705-308 | Shank Assy., 1x3 S.O. LH (8") | |
| | 705-309 | Shank Assy., 1x3 S.O. RH (8") Pictured | |
| 6. | 631-300 | Shank, 1 x 3 x 34" | 1 |
| 7. | 631-308 | Shank, Side Offset 1x3 LH (8") | 1* |
| | 631-309 | Shank, Side Offset 1x3 RH (8") | 1* |
| 8. | 628-003 | Foot Piece, For 1x3 Shank | 1 |
| 9. | 601-1012Z | Bolt, HCS ZP GR2 5/8 x 3" | 1 |
| 10. | 601-0811Z | Bolt, HCS ZP GR2 1/2 x 2-3/4" | 1 |
| 11. | 611-1001Z | Nut, Hex ZP 5/8" | 1 |
| 12. | 611-0801Z | Nut, Hex ZP 1/2" | 1 |

| Ref. | P/N | Description | Qty. Req. Per Row |
|---|----------------|---|-------------------|
| 13. | 616-1000Z | Wshr., Flat ZP 5/8" | 2 |
| 14. | 638-086 | Sweep, 16" Winged PrepMaster | 1 |
| | 638-090 | Sweep, 20" Winged PrepMaster | |
| | 638-014 | Sweep, Cultivator 14" | |
| | 638-016 | Sweep, Cultivator 16" | |
| | 638-018 | Sweep, Cultivator 18" | |
| | 638-020 | Sweep, Cultivator 20" | |
| Many Other Sweep Sizes And Types Are Available. | | | |
| C. | 638-095 | Bolt, Nut & Wshr. Pack, Winged Sweep | |
| 15. | 604-1224Z | Bolt, Crg. ZP GR5 3/4 x 6" | 1 |
| 16. | 611-1201Z | Nut, Hex ZP 3/4" | 1 |
| 17. | 615-1200 | Wshr., Lock 3/4" | 1 |
| 18. | 616-1202Z | Wshr., Flat ZP 3/4" (Heavy) | 1 |
| D. | 885-260 | Nozzle Kit, 21" Bed Cond (No Tip) | |
| 19. | 685-260 | L-Rod, 3/8" Nozzle Placement | 1 |
| 20. | 685-262 | Sleeve W/Mount Bolt (L-Rod Mnt.) | 1 |
| 21. | 685-264 | Sleeve W/Pipe 1/4" MP (Nozzle) | 1 |
| 22. | 685-270 | Single Swivel, 1/4" FP (Less Tip) | 1 |
| 23. | 606-0703Z | Set Screw, Sqr. Hd. ZP 7/16 x 3/4" | 2 |
| 24. | 685-271 | Cap, Nylon (Nozzle Kit) | 1 |
| 25. | 614-0701Z | Nut, Hex Whizlock ZP 7/16" | 1 |

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PrepMaster Parts Diagram/Parts List

(Optional Bedding Tools/ Tool Bar Stand)

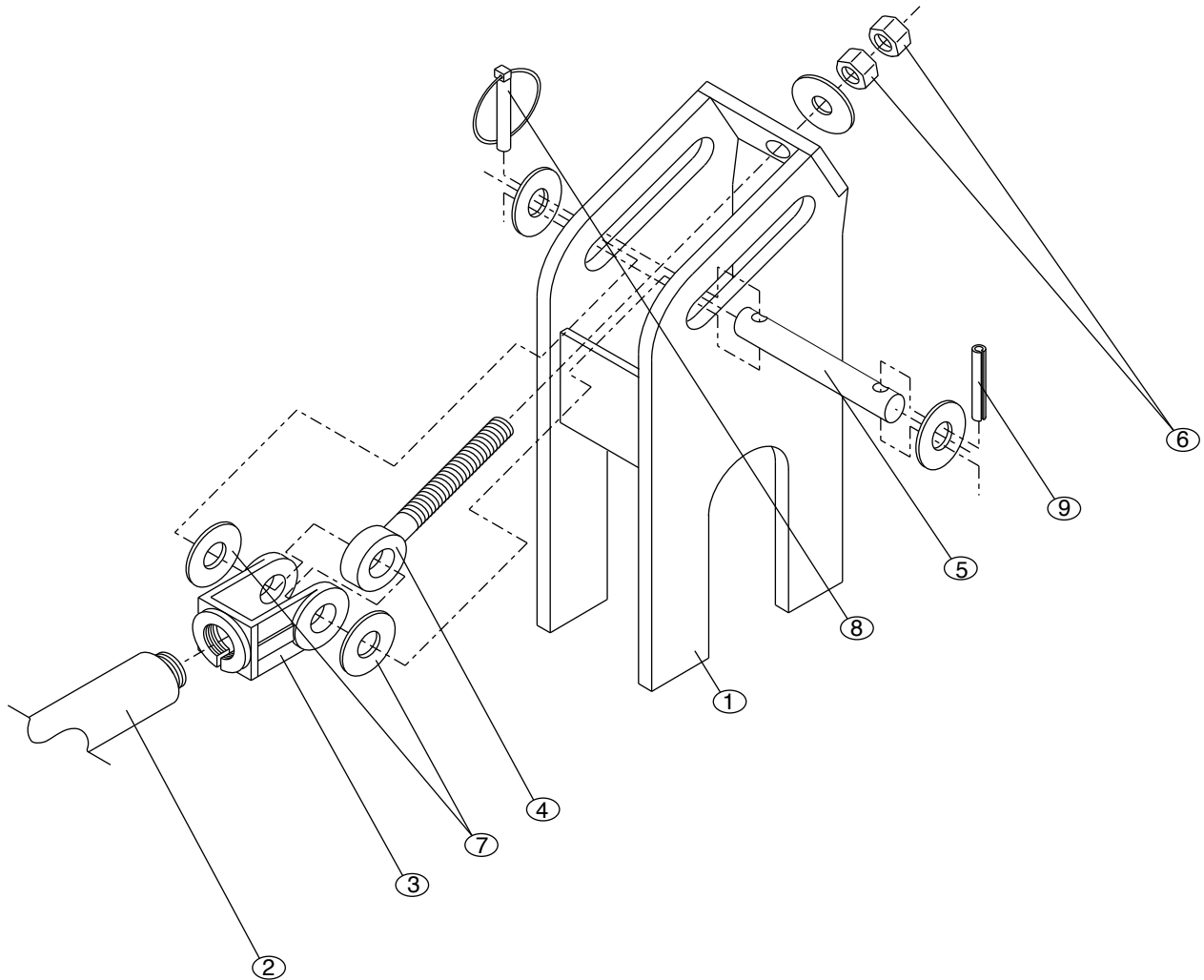


| Ref. | P/N | Description | Qty Req. | Per Row |
|-----------|----------------|---|----------|---------|
| A. | 870-200 | Shank, Clamp & Buster Kit 1x3;#346 | | |
| B. | 806-473 | Clamp, 4x7 For 1x3 Shank | | |
| 1. | 628-700 | Body, Clamp 4" 1x3 Shank | 1 | |
| 2. | 628-400 | Cap, 4" 7/8 & 1" Bolt Holes | 1 | |
| 3. | 609-1438Z | Bolt, HMB ZP 7/8 x 9-1/2" | 2 | |
| 4. | 606-1006Z | Set Screw, SQR HD ZP 5/8x1-1/2" | 3 | |
| 5. | 611-1401Z | Nut, Hex ZP 7/8" | 2 | |
| C. | 705-303 | Shank Assy,1x3 Rear Offset | | |
| | 705-301 | Shank Assy.,1x3 S.O. LH (5") | | |
| | 705-302 | Shank Assy.,1x3 S.O. RH (5") | | |
| 6. | 631-303 | Shank, 1x3 Rear Offset | 1 | |
| 6a. | 631-301 | Shank, 1x3 Side Offset LH | 1 | |
| 6b. | 631-302 | Shank, 1x3 Side Offset RH | 1 | |
| 7. | 628-003 | Foot Piece, For 1x3 Shank | 1 | |
| 8. | 601-1012Z | Bolt, HCS ZP GR2 5/8 x 3" | 1 | |

| Ref. | P/N | Description | Qty Req. | Per Row |
|------------|----------------|--|----------|---------|
| 9. | 601-0811Z | Bolt, HCS ZP GR2 1/2 x 2-3/4" | 1 | |
| 10. | 611-1001Z | Nut, Hex ZP 5/8" | 1 | |
| 11. | 611-0801Z | Nut, Hex ZP 1/2" | 1 | |
| 12. | 616-1000Z | Wshr., Flat ZP 5/8" | 2 | |
| D. | 870-150 | Buster,Block & Bolt Kit #346 | | |
| 13. | 638-350 | Bolt, Nut & Washer Pack for 346 | | |
| 14. | 636-995 | Block, Buster for #346 | 1 | |
| 15. | 604-1220Z | Bolt, Crg. ZP GR5 3/4 x 5" | 1 | |
| 16. | 611-1201Z | Nut, Hex ZP 3/4" | 1 | |
| 17. | 616-1202Z | Washer, Flat ZP (Heavy) 3/4" | 1 | |
| 18. | 615-1200Z | Wshr., Lock ZP 3/4" | | |
| 19. | 638-346 | Lister Bottom, # 346 | | |
| 20. | 638-111 | Lister Bottom, # 11W | | |
| E. | 814-966 | Stand Assy. 4 x 4" (Set Screw Lock) | | |
| | 814-967 | Stand Assy. 4 x 7" (Set Screw Lock) | | |
| 21. | 636-975 | Stand, 3/4 x 2-1/2 x 44" | 1 | |
| 22. | 636-980 | Clamp Body, 4" for 3/4"Shank | 1 | |
| 23. | 628-200 | Cap, 4" 3/4 Bolt Holes (Cast) | 1 | |
| 24. | 601-1226Z | Bolt, HCS ZP GR2 3/4 x 6-1/2" | 2 | |
| 24. | 609-1238Z | Bolt, HMB ZP 3/4 x 9-1/2" | 2 | |
| 25. | 611-1201Z | Nut, Hex ZP 3/4" | 2 | |

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PrepMaster Parts Diagram/Parts List (Folding Tool Bar Wing Linkage Assembly)

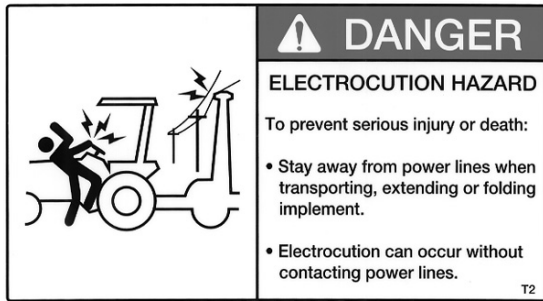


| Ref. | P/N | Description | Qty. Req. |
|------|-----------|-------------------------------------|-----------|
| 1. | 723-015 | Cylinder Lug Wlmt., Wing | - |
| 2. | 619-420 | Cylinder, Hyd. 4 x 48 Tie Rod | 2 |
| | 620-248 | Seal Kit, 4 x 48" Cyl. (PRINCE) | |
| | 620-248H | Seal Kit, 4 x 48" Cyl. (HYDRO LINE) | |
| | 620-250 | Seal Kit, 4 x 48" Cyl. (RED LION) | |
| | 620-252 | Seal Kit, 4 x 48" Cyl. (CROSS) | |
| 3. | 619-430 | Yoke, 4x8 Hydraulic Cylinder | - |
| 4. | 610-1625Z | Eyebolt, ZP Forged 1 x 8" | 2 |
| 5. | 617-188 | Pin, Clevis ZP 1 x 4-7/16" Usable | 2 |
| 6. | 614-1601Z | Nut, Hex Jam Zp 1" | 4 |
| 7. | 616-1600Z | Washer, Flat ZP 1" | 10 |
| 8. | 617-105 | Klik Pin, 7/16 x 2" | 2 |
| 9. | 617-053 | Pin, Roll 7/16 x 2-1/4" | 2 |

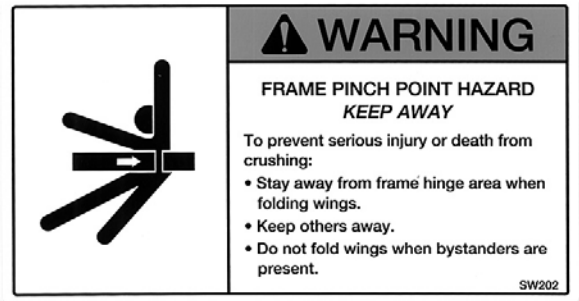
BIGHAM BROTHERS, INC.

Safety
Warning
Signs on
Front of
Tool Bar
Mast:

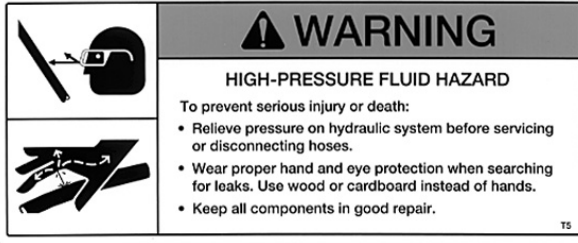
Folding
Tool Bars



P/N 399-043



P/N 399-042



P/N 399-044



P/N 399-041

BB BIGHAM BROTHERS, INC.
806-745-0384 705 E. Slaton Rd.
P.O. Box 3338 Lubbock, TX 79452

Made In U.S.A.

P/N 399-011 Front of Tool Bar Mast



P/N 399-012



P/N 399-050

PrepMaster®

P/N 399-027

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P/N 399-010

PrepMaster®

P/N 399-028

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Notes:

This image shows a full page of blank white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for writing or drawing. There are no margins, text, or other markings present.