HAYBUSTER

1430
STACK MOVER

OWNERS MANUAL
and
PARTS BOOK

PRICE $2.50

HAYBUSTER MANUFACTURING, BOX 1950, JAMESTOWN, NORTH DAKOTA 58401

NOTICE

Bed beams are numbered 1 thru 8. Numbers can be seen on bearing plate at front of beam. Page #10 shows position of each numbered beam.

STEP #11. Position bed beam #3 and #6 on main frame. Four (4) shims are provided. Shim where necessary, illustration #1 page #7. Put in all bolts, but do not tighten at this time.

STEP #12. Install steering arm, illustration #2 page #7. 5/8" bolt in assembly fixture may have to be loosened allowing bed to shift ahead or back while aligning bolts going thru steering arm and bracket.

STEP #13. Bolt crossbeam #1 and #4 to bed beams #3 and #6 leaving bolts loose, **CAUTION** — To prevent bed beams from hinging back and down while working under and around mover during assembly, secure front of beams by wrapping chain around cross beam #1 and hitch crossmember. See illustration #2 page #7.

STEP #14. Install remaining bed beams in their appointed position. Refer to page #6 and page #8 for bolt style and size. All bolts must be in place in all bed beams before tightening to allow for hole alignment.

STEP #15. Axle end stabilizers can now be installed, illustration #1, #2, and #3, page #8. Place saddle end of stabilizer over end of axle. Insert stabilizer pivot tube in upper end of stabilizer with outside spacer next to outside bed beam, install bolts and tighten. Place end cap under axle and install bolts. **IMPORTANT** - Four (4) 1/2" x 1-1/2" bolts thru cap must be grade 5 bolts. Tighten bolts evenly from side to side. Torque to 130 ft.-lbs. One (1) 3/4" x 2" bolt thru cap and axle must also be grade 5. Bolts torqued to at least 200 ft.-lbs.

STEP #16 Slide bearings over either end of bed rollers. Bolt to bed beams. Illustration #1 page #9. Also see page #10.

STEP #17. Four (4) 18 tooth coupler spkts. are provided. Two (2) coupler spkts. have 1-7/16" bore to key on gear box drive shaft.

STEP #18. Set gear box on top of mounts between bed beams #4 and #5, page #10. Gear box shield mounts on same bolts, illustration #2 page #9. Do not tighten bolts at this time to allow for alignment of bed drive shaft.

STEP #19. Assemble drive sprockets and bearings on bed drive shaft, illustration #1 page #11. Coupler sprockets with 1-1/2" bore key to end of drive shaft with 6" key slot. Bolt assembly to beams using shims only where base of brg. does not contact bearing mounts. Two (2) different thickness shims are provided, see illustration #1 page #11. Connect coupler chain over coupler sprockets. After gear box and drive shaft are properly aligned, tighten all necessary bolts.

—CAUTION—

STEP #20. Being sure that #1 crossbeam is chained to hitch crossmember, install hydraulic cylinder opposite assembly fixture. Remove assembly fixture and install second cylinder.

STEP #21. Connect and route hoses as instructed, page #13.

STEP #22. Bed chains can be installed by running a heavy wire thru bed beam. Attach wire at rear end of beam to chain with attachment links. Attachment links are links with holes thru the side bars. Pull chain thru beam until first attachment link will lay on top of drive sprocket. This will make all attachment links even across bed when installation is complete. Lay smooth chain in track on top side of beam. With chain tightener fully retracted, connect chains. Be sure to bend cotter keys around pin to prevent key from coming out. Use 1-1/8" open end wrench thru open slot in beam to tighten chains. Correct tension can be determined by lifting chain at center of beam. At arms length, there should be approximately (4) inches between chain and top of beam. **NOTE: Chain will tend to loosen at first until initial stretch is gone. If chain tends to double up behind drive sprocket when unloading under normal operations, indications are, chain is too loose and should be tightened to prevent doubling. Chain can only be tightened until stud bolt in tightener reaches end of slot in beam, see illustration #2 page #11. Purpose of stud bolt is to prevent loosening tightener under stack in case of chain breakage.**

STEP #23. It is now safe to remove chain holding bed beams to hitch. Couple hydraulic lines to tractor and charge hydraulic cylinders for operation.

— CAUTION —

Be sure wheel bolts are tight before putting machine in operation.

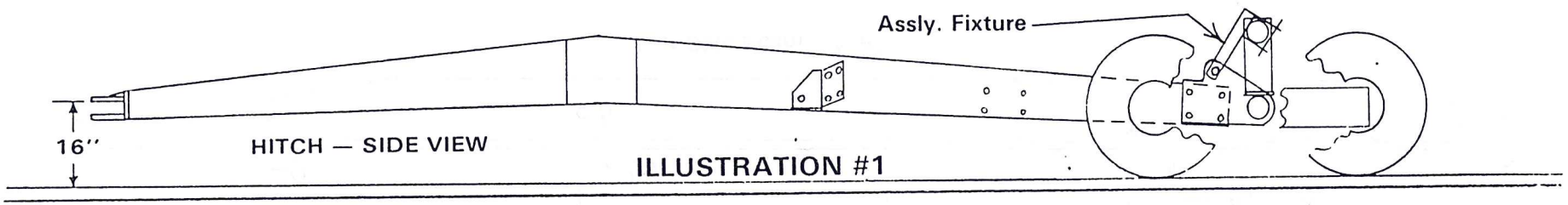


ILLUSTRATION #1

Bolt Size
(A) 5/8" x 1-1/2"
(B) 5/8" x 2"

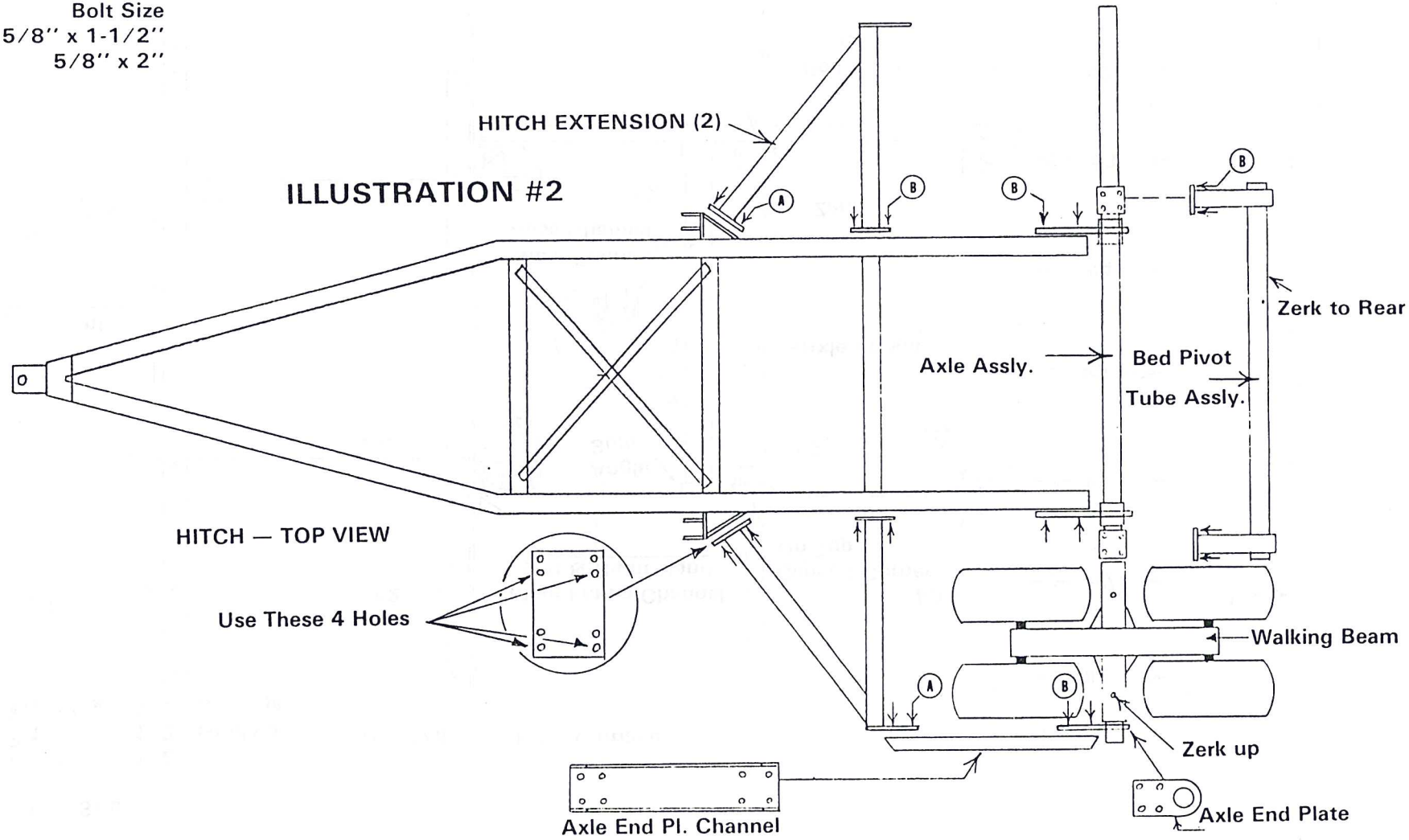
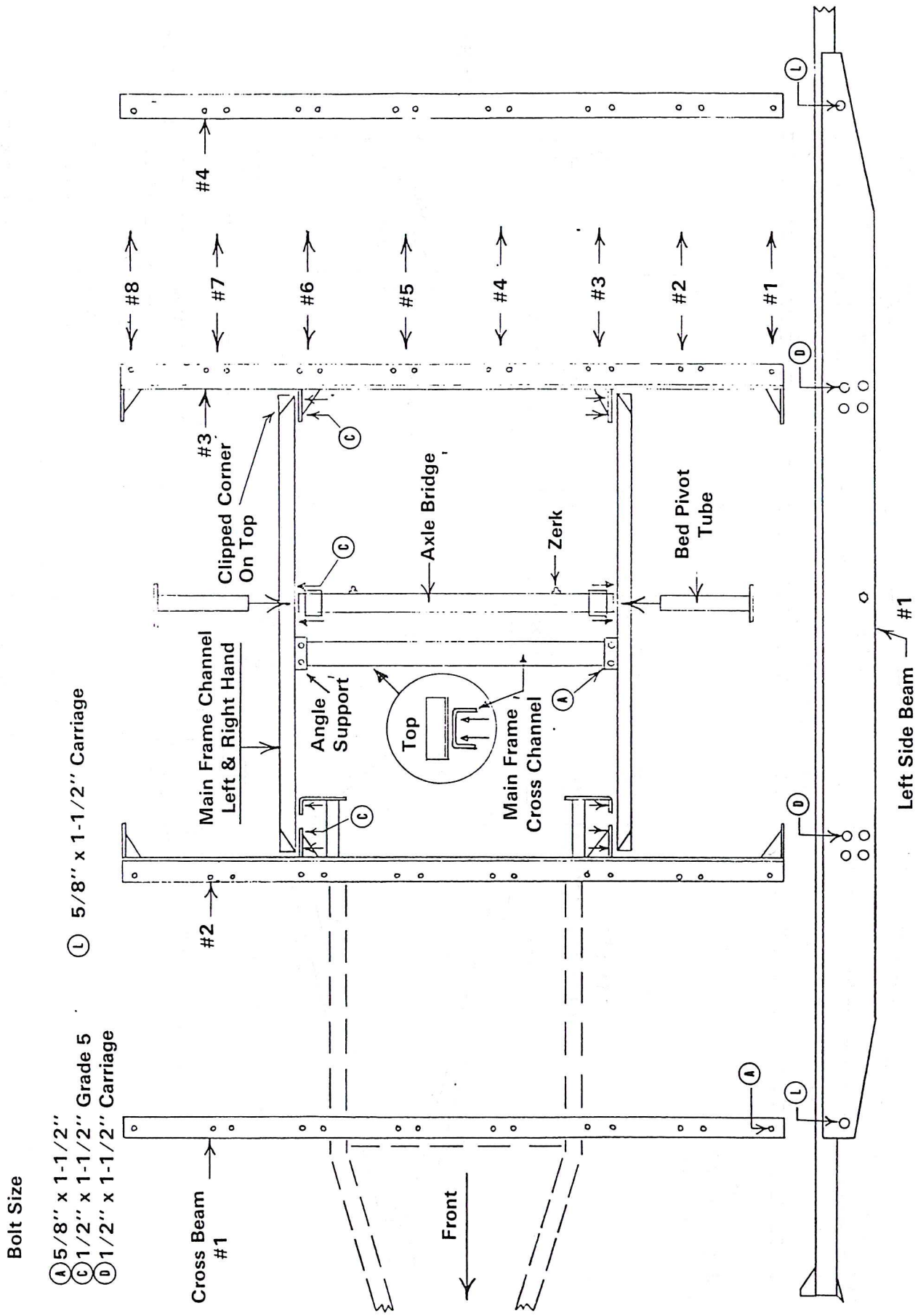


ILLUSTRATION #2


Bolt Size
(A) 5/8'' x 1-1/2''
(C) 1/2'' x 1-1/2'' Grade 5
(D) 1/2'' x 1-1/2'' Carriage
(L) 5/8'' x 1-1/2'' Carriage
Cross Beam #1
Front
#2
#3
#4
#8
#7
#6
#5
#4
#3
#2
#1
Clipped Corner On Top
Axle Bridge
Zerk
Bed Pivot Tube
Main Frame Channel Left & Right Hand
Angle Support
Top
Main Frame Cross Channel
Left Side Beam
#1

Bolt Size
(A) 5/8" x 1-1/2"
(J) 1/2" x 2"
(H) 3/4" x 4-1/2"

SIDE VIEW — BED BEAM #3

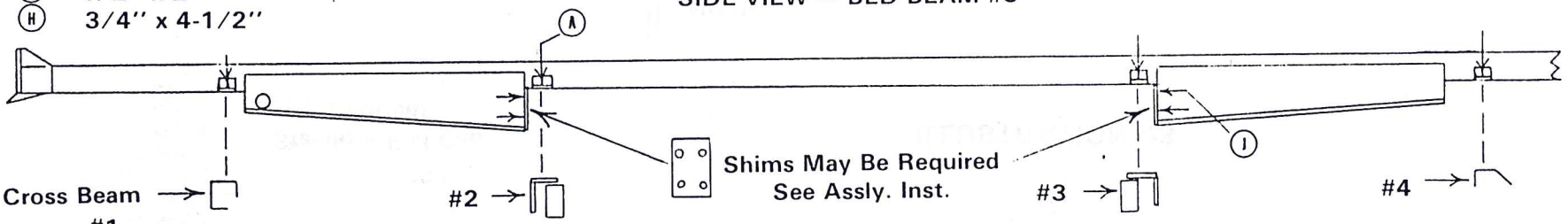


ILLUSTRATION #1

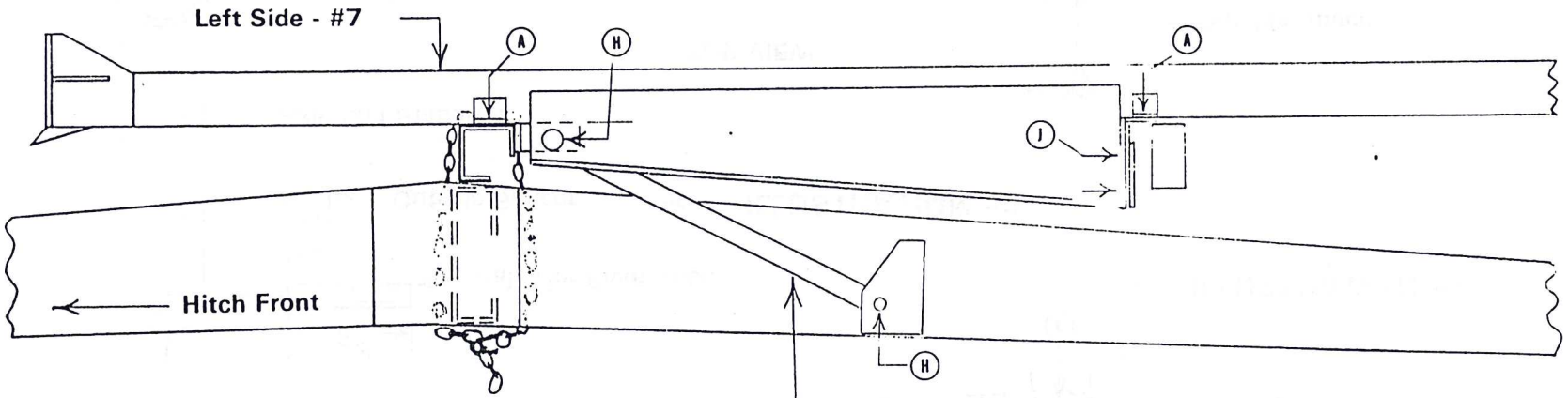
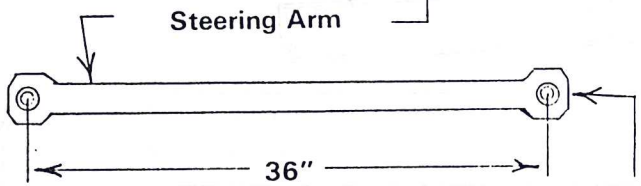


ILLUSTRATION #2



Use 3/4" x 4-1/2" Bolt With Crimp Type Lock Nut Do Not Lock Up Pivots.

Bolt Size

Ⓒ 1/2" x 1-1/2" — Grade 5

Ⓔ 3/4" x 2" — Grade 5

Ⓕ 3/4" x 6-1/2"

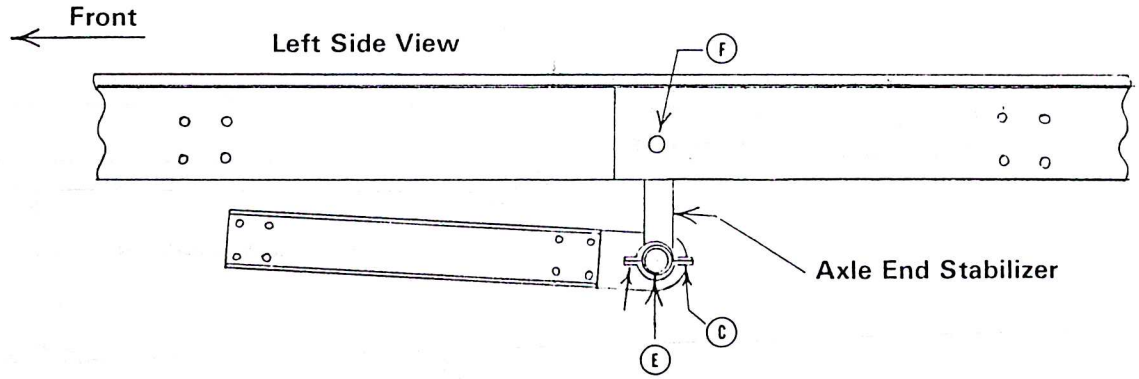


ILLUSTRATION #1

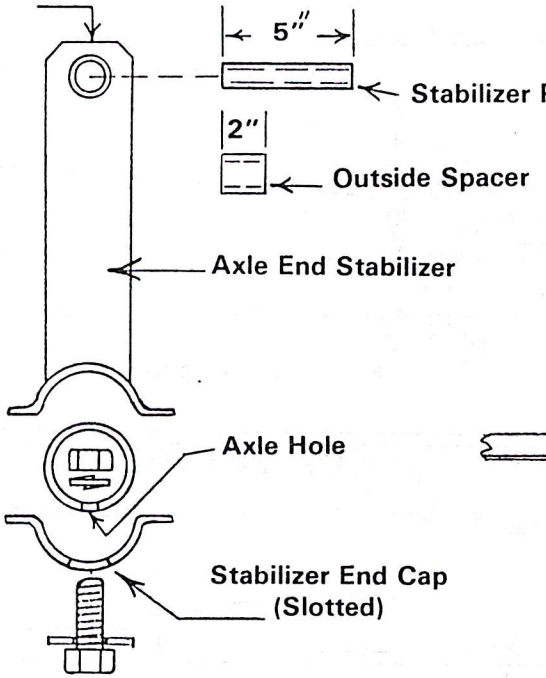


ILLUSTRATION #2

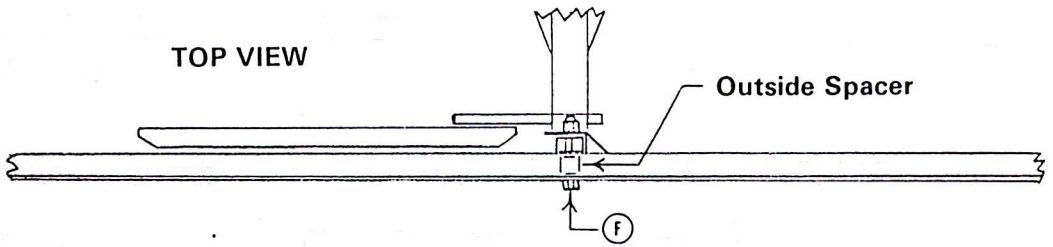


ILLUSTRATION #3

NOTE —
14 foot long axle tube has a hole in each end. These holes must be on BOTTOM To except the 3/4" x 2" bolt thru the stabilizer end cap. DO NOT DELETE THESE BOLTS

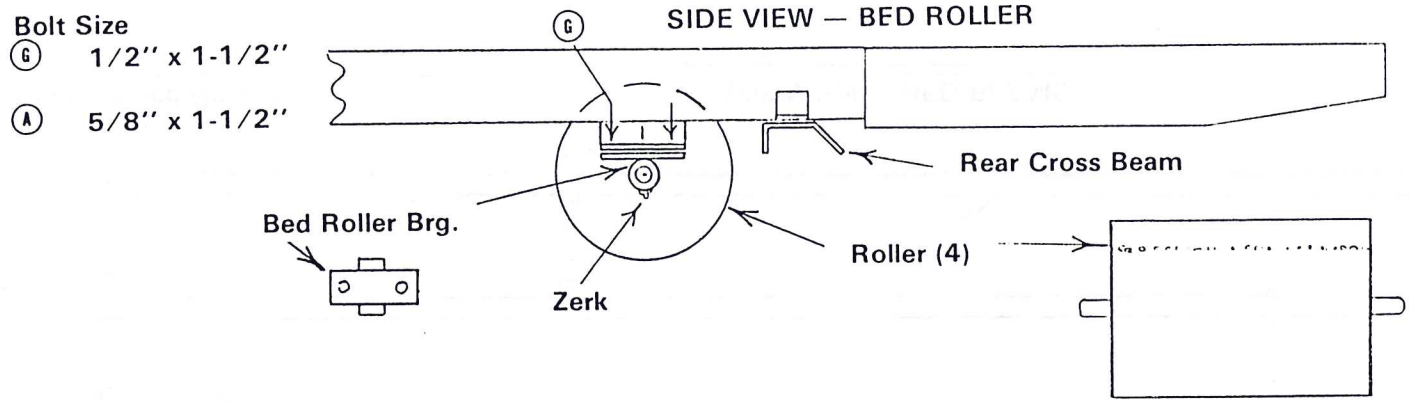


ILLUSTRATION #1

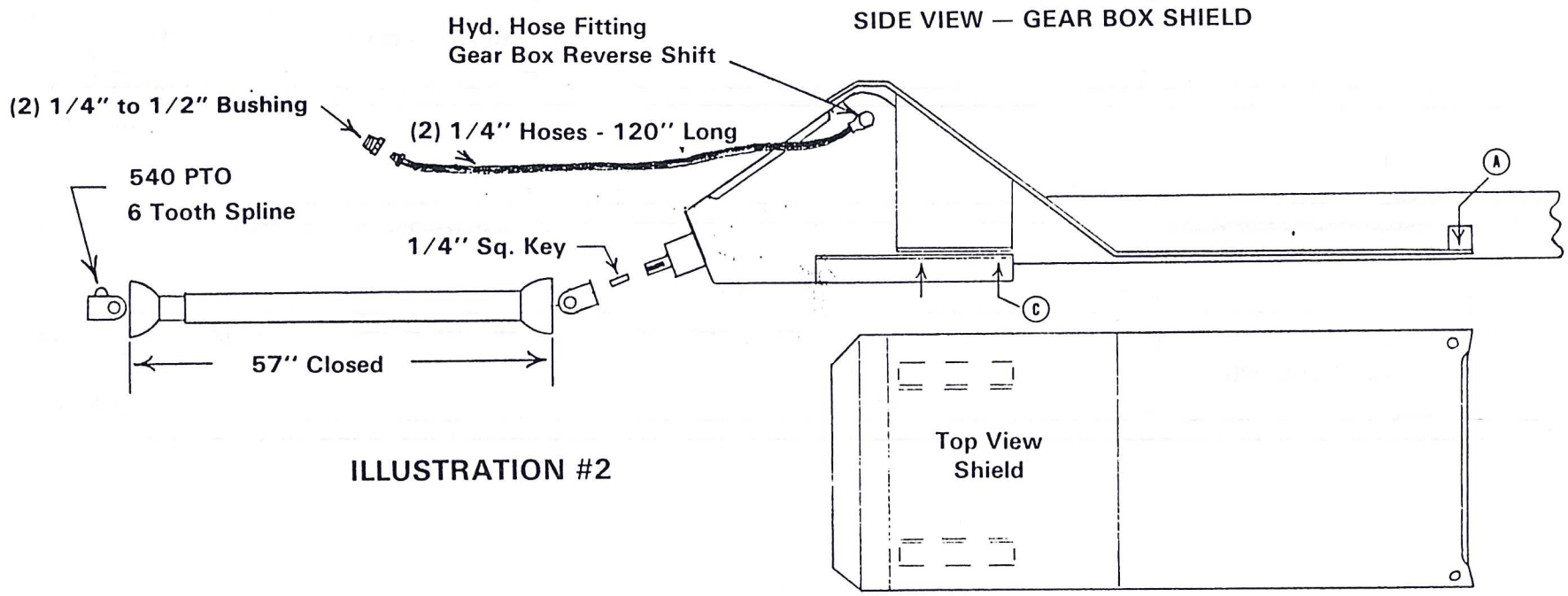
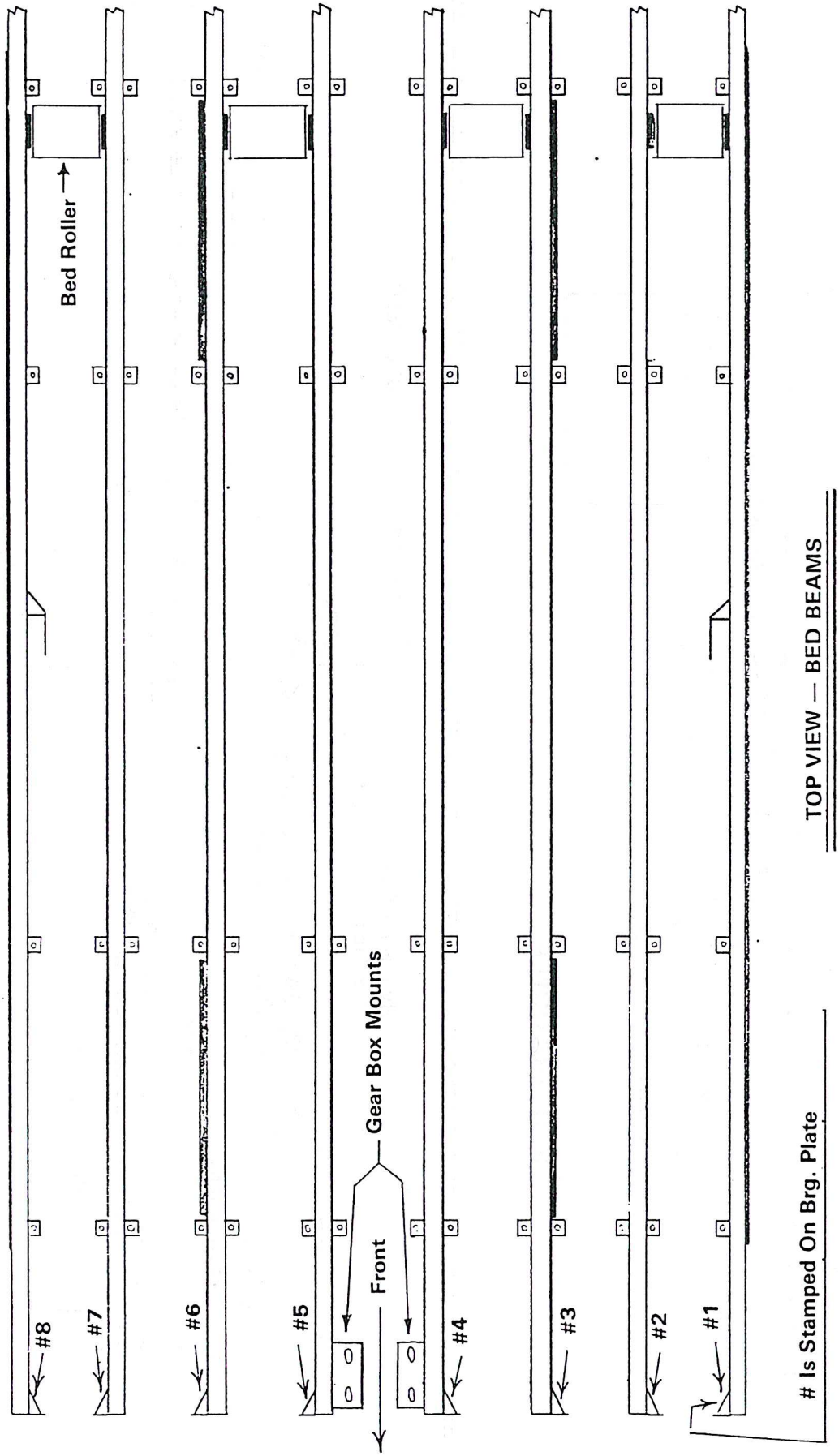


ILLUSTRATION #2



TOP VIEW — BED BEAMS

NOTE — 8 Beams Required All Beams are Different

Bolt Size

(J) 1/2" x 2"

(G) 1/2" x 1-1/2" Grade 5

(K) 3/8 x 3/4"

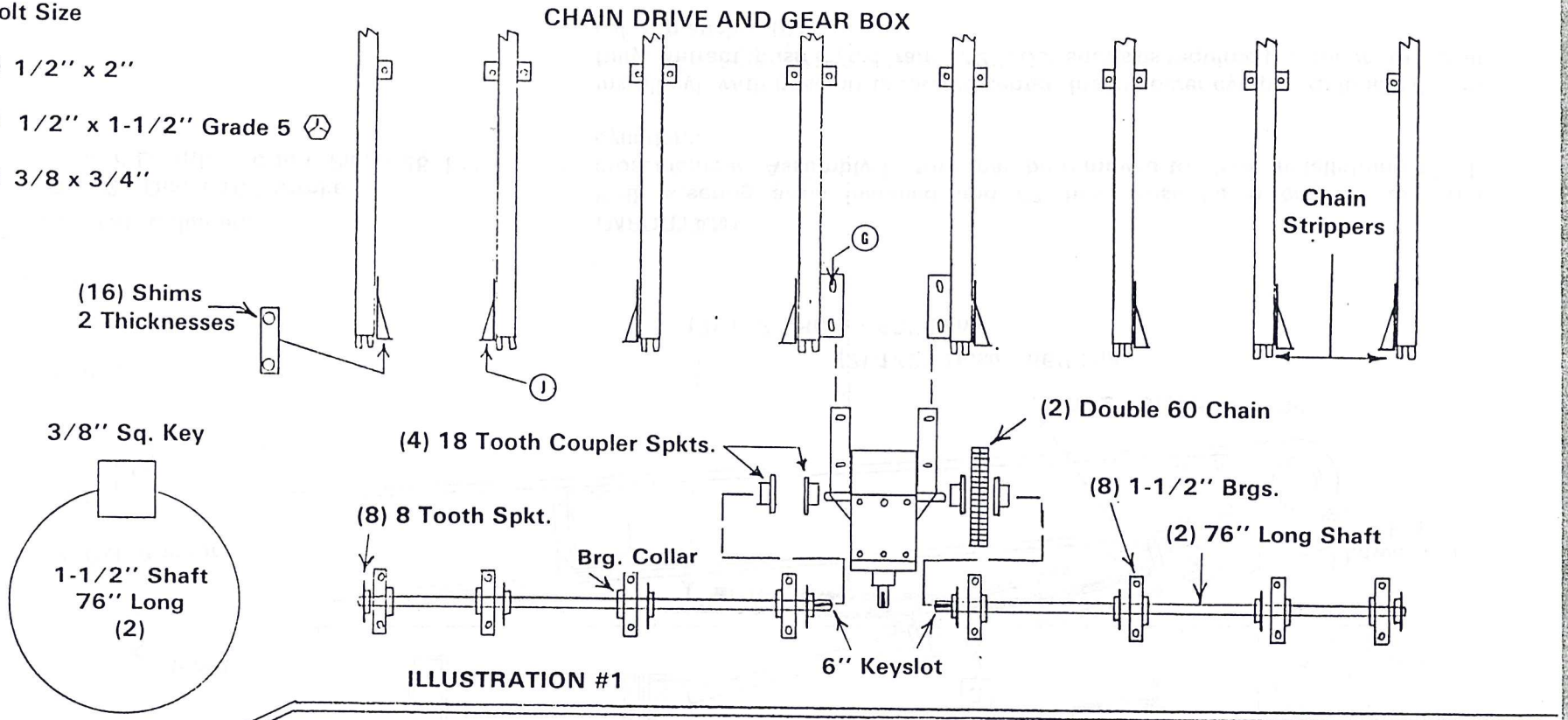
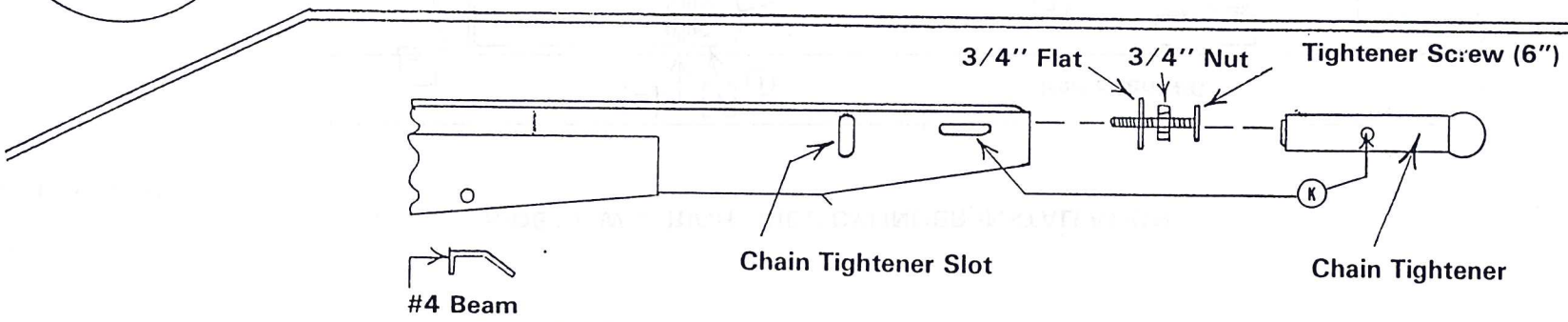


ILLUSTRATION #1



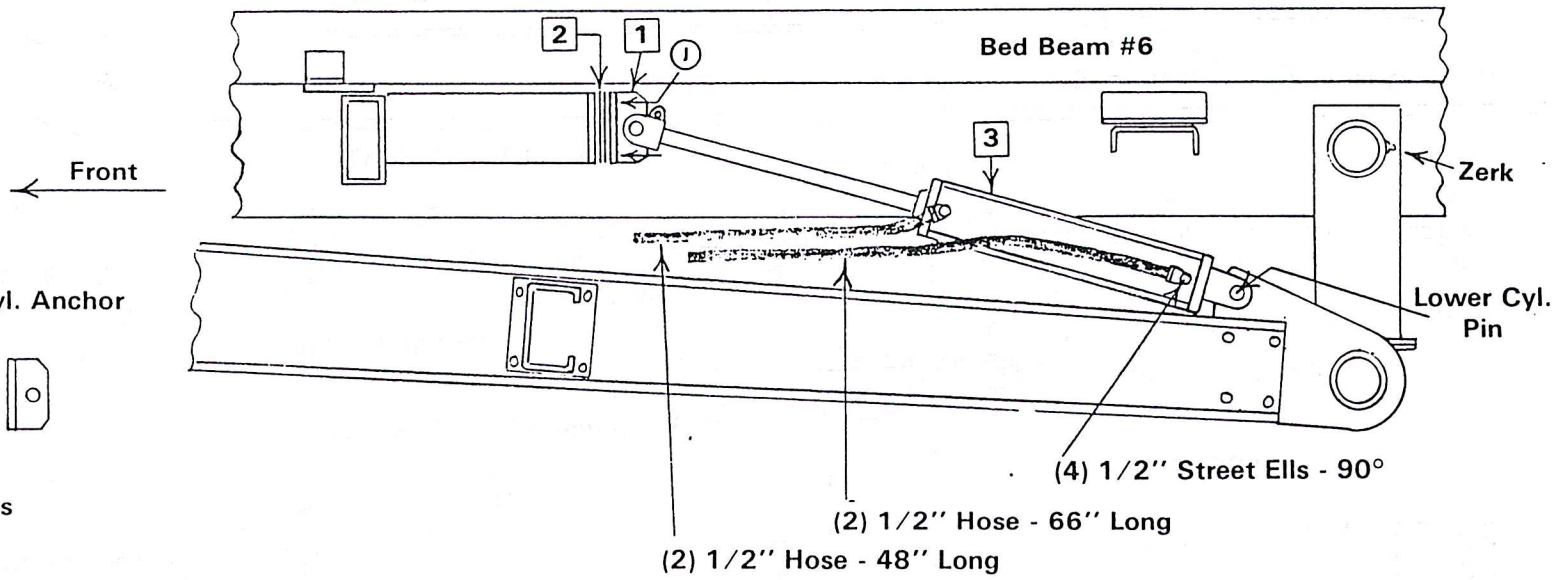
SIDE VIEW - CHAIN TIGHTENER ASSEMBLY

ILLUSTRATION #2

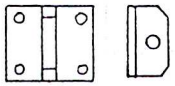
Bolt Size

① 1/2" x 2"

SIDE VIEW — RIGHT SIDE CYLINDER INSTALLATION



[1] (2) Cyl. Anchor

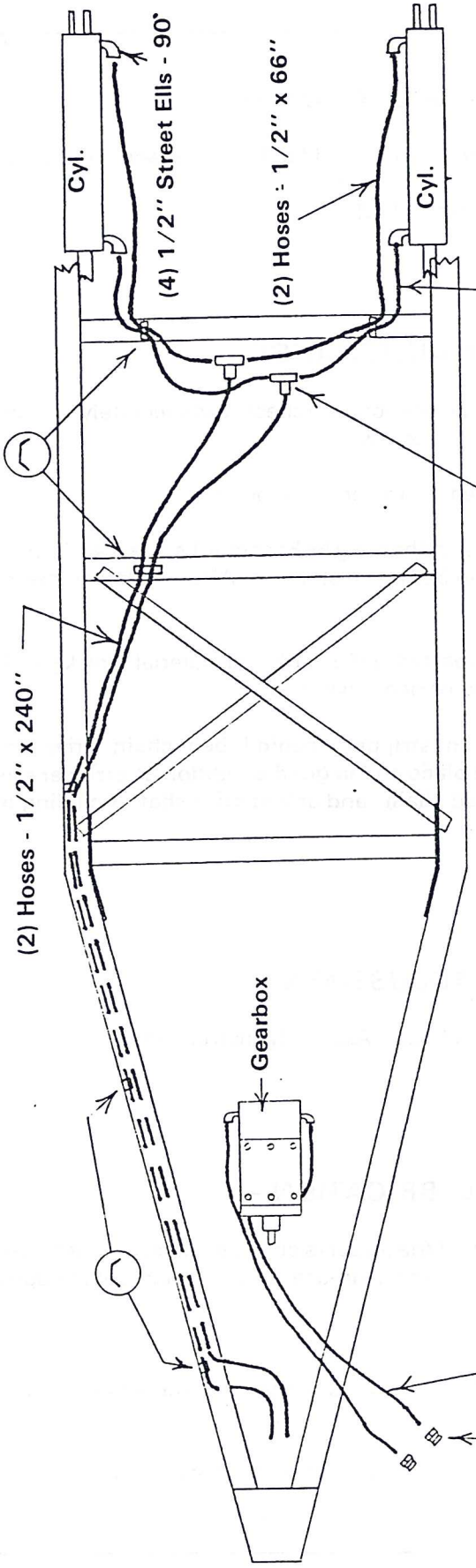


[2] Shims

[3] (2) Hyd. Cylinders
3-1/2" Dia. x 16" Stroke
Closed Length — ¢ to ¢ Pins - 26-1/4"

IMPORTANT
With steering arms installed and #1 bed cross beam chained to hitch crossmember, Assembly Fixture may be removed to allow installation of hyd. cylinders.

Install cyl. with hose ports toward center. Install lower cyl. pin. Extend cyl. ram fully. Retract (push in) cyl. ram 1/2". Use shims as required (#2 above) to install cyl. top anchor (#1).



Use pipe tape or compound on all joints. Route hoses thru clips — Hammer Clips Down. Charge with oil and check for leaks.

— OPERATION —

Your Haybuster 1430 Stackmover is designed for 12 ton capacity. Do not overload.

Recommended P.T.O. speed — 540 R.P.M.

— MAINTENANCE —

Keep wheel bolts tight — Wheel bolts should be checked immediately after machines initial use to insure bolts seating properly.

All other bolts should be checked during break in period.

Set screws in bed drive sprockets and bearing locks should be checked during break in period to prevent misalignment in bed chain strippers. Also check for movement of U joint on gear box input shaft.

All 3/8" square keys in bed drive parts are of a hardened material. Soft keys will result in damage to gear box shaft and or bed drive shaft.

CAUTION — Make sure chain strippers behind bed chain drive sprockets illustration #1 page #11, are in place and in good condition. A stripper missing or bent can result in damage to bed chains and or bed drive shaft including gear box main shaft.

— ADJUSTMENT —

Keep bed chains properly adjusted. (See Assembly Instructions.)

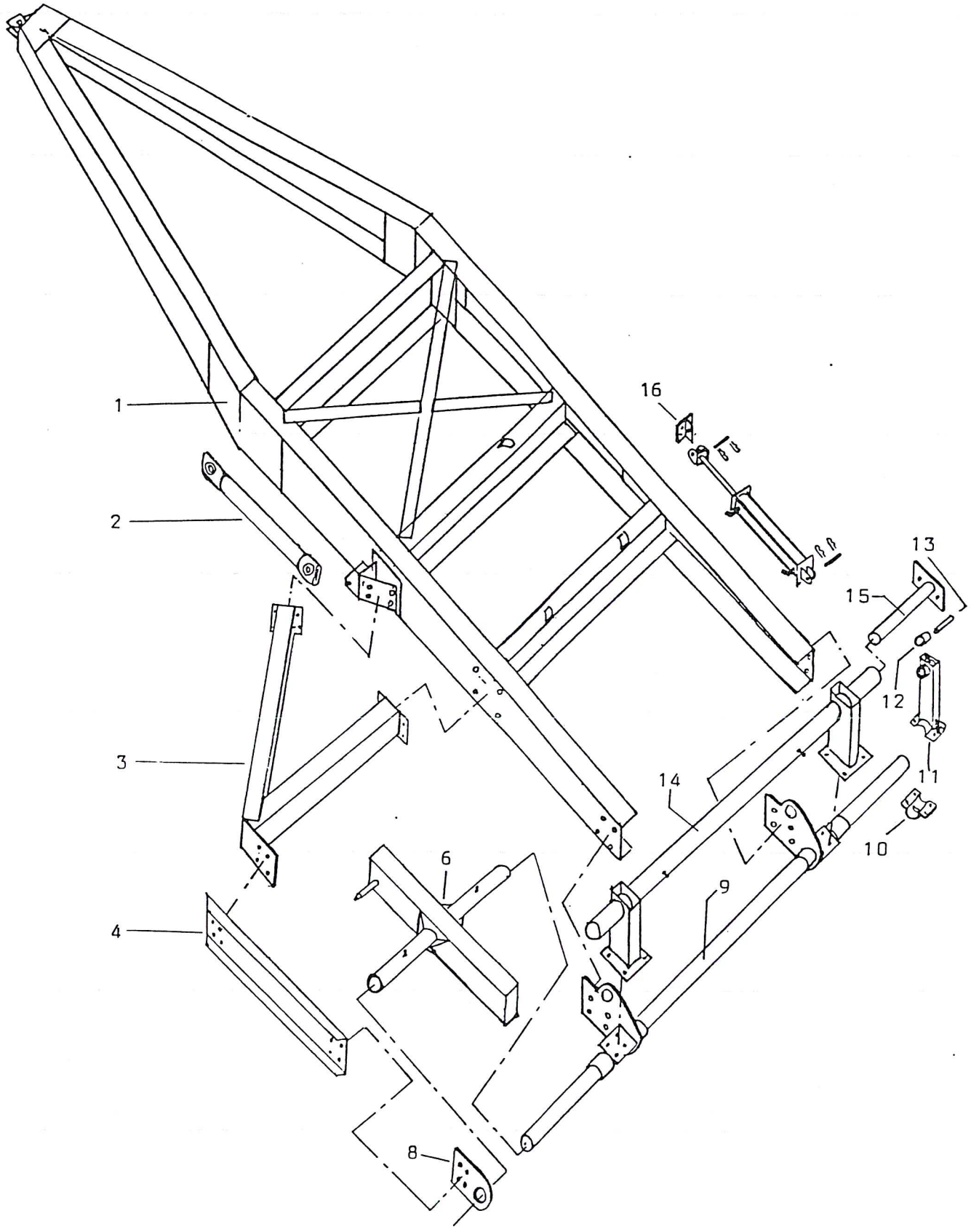
— LUBRICATION —

Approximately 50 strokes in each of the (4) zerks on the walking beams for the initial greasing. All other bushings will show grease around their outer edges when sufficiently lubricated.

Due to the angle at which the P.T.O. runs, U joints and slide should be greased regularly.

Gear box should have approximately 1-1/2" #90 gear lub. with bed in down position.

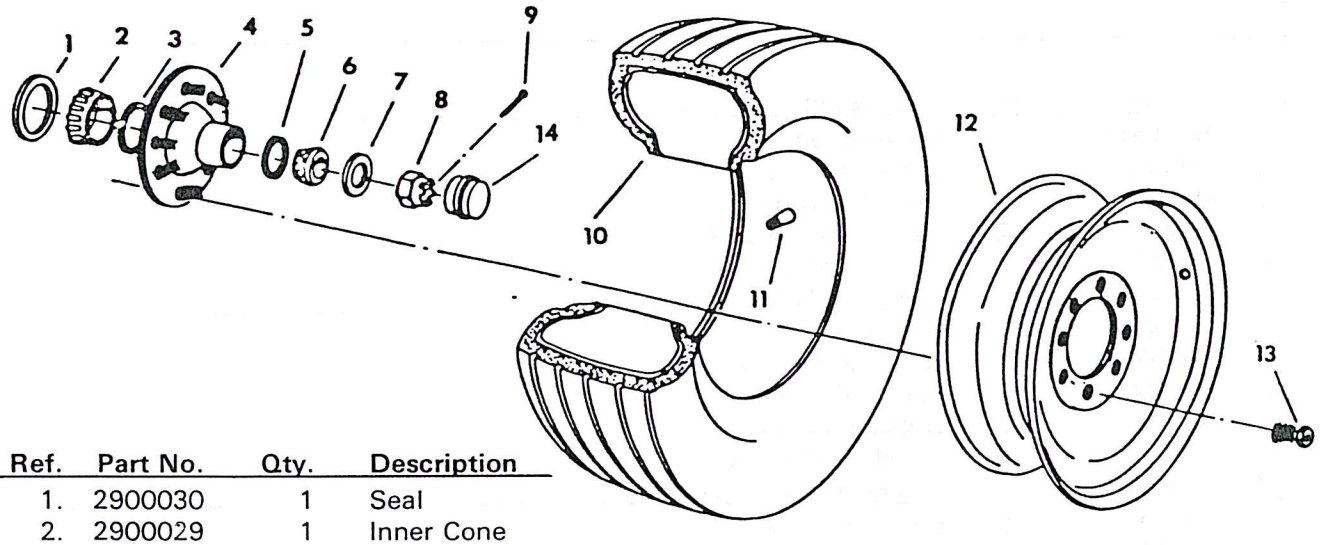
16 Lower Assembly



Ref.	Part No.	Qty.	Description
1.	7800001	1	Hitch Assembly
2.	7800002	2	Steering Arms
3.	7800003	2	Hitch Extension
4.	7800004	2	Axle End Plate Channel
5.	7800005	2	Walking Beam
6.	7800006	2	Axle End Plate
7.	7800007	1	Axle Assembly
8.	7800008	2	Axle End Stabilizer Cap
9.	7800009	2	Axle End Stabilizer
10.	7800010	2	Outside Spacer
11.	7800011	2	Stabilizer Pivot Tube
12.	7800012	1	Bed Pivot Tube Assembly
13.	7800013	2	Bed Pivot Tube
14.	7800014	2	Upper Cylinder Anchors

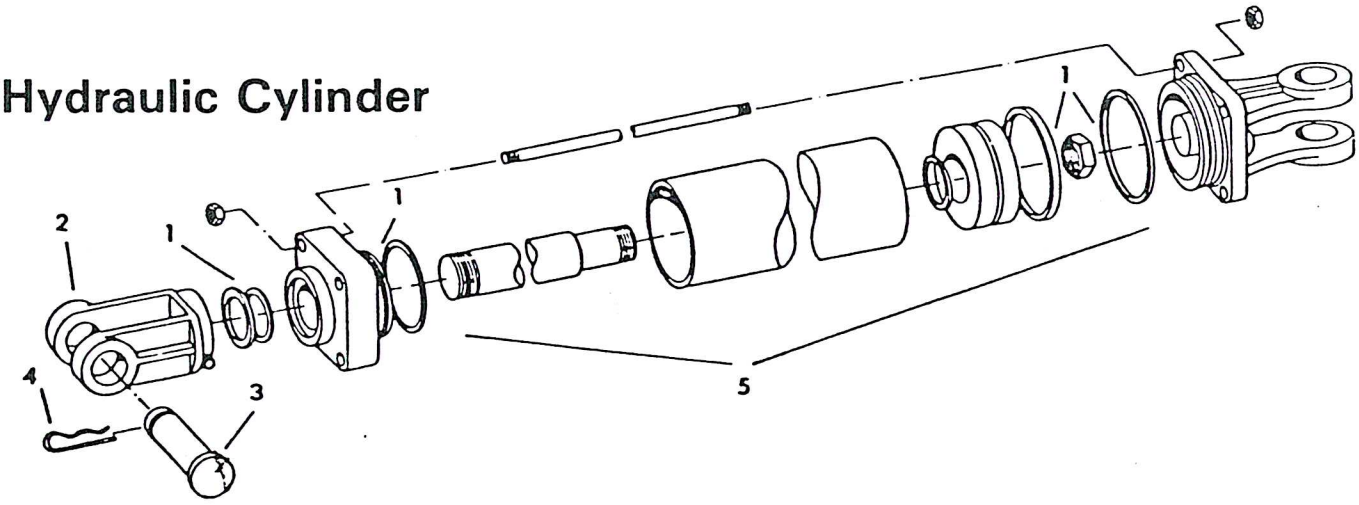
See assembly sheets for: Bolt Size and description Hydraulic hose and fittings.

20 Hub and Wheel Assembly

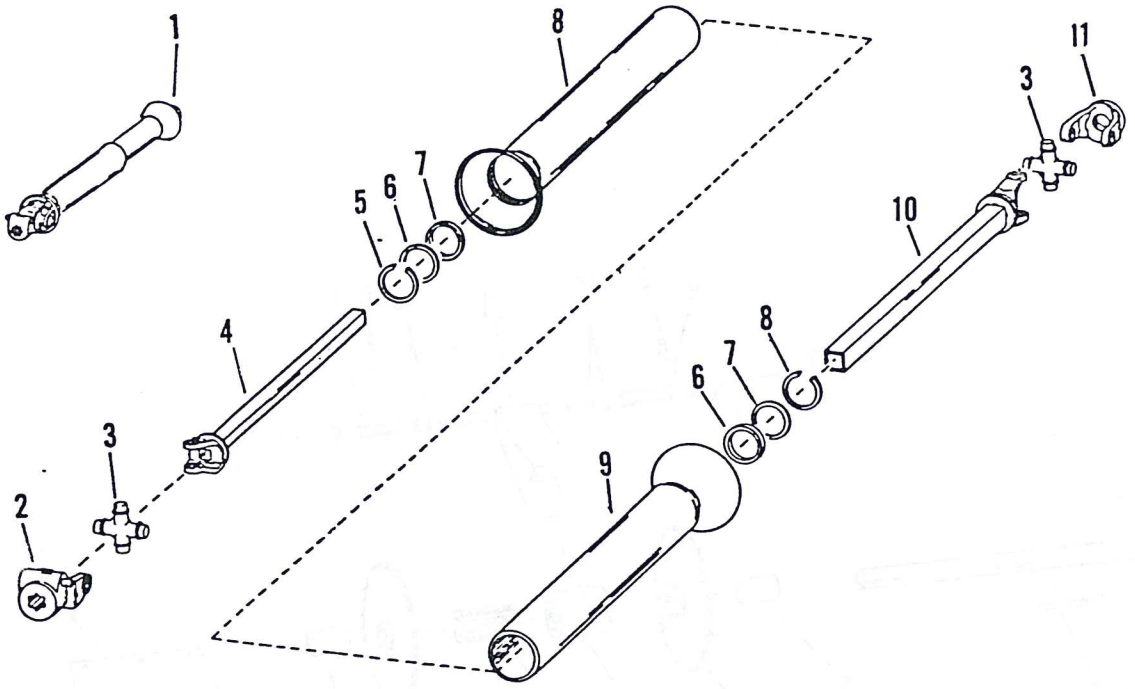


Ref.	Part No.	Qty.	Description
1.	2900030	1	Seal
2.	2900029	1	Inner Cone
3.	2900028	1	Inner Cup
4.	2900052	1	Hub Complete, Seals, Bearings, Cap Bolts
5.	2900051	1	Hub W/Cups & Stud Bolts
6.	2900025	1	Outer Cone
7.	2900024	1	Outer Cup
8.	2900023	1	Washer
9.	2900022	1	Nut
10.	2900021	1	Cotter Pin
11.	2600010	1	12.5 L 16 Tire
	2600006		116-16 Tire
12.	2700007	1	12.5 L 16 Tube
	2700004		116-16 Tube
13.	2800007	1	Wheel 16"
14.	2900053	8	Nut
15.	2900020	1	Hub Cap

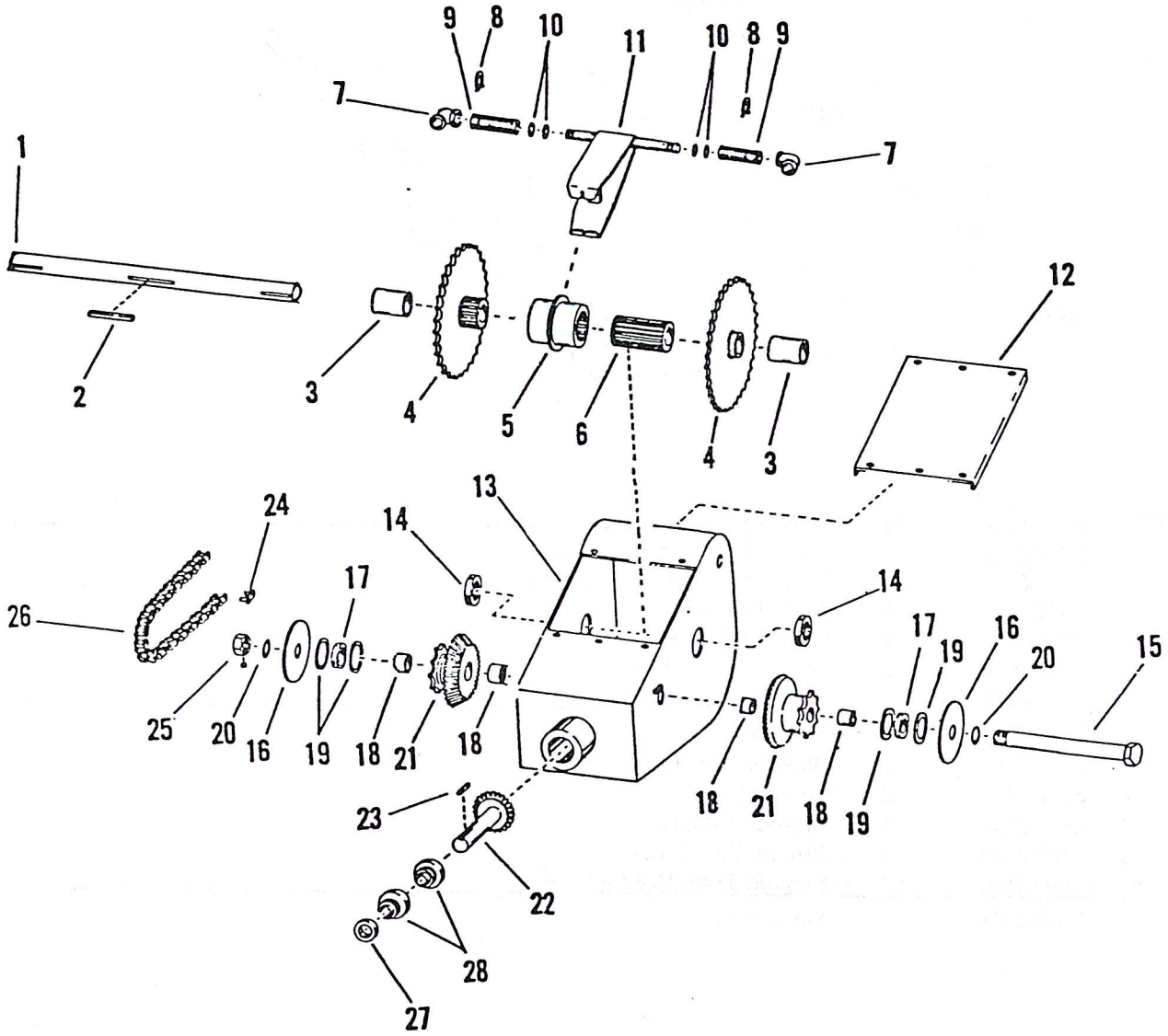
Hydraulic Cylinder



Ref.	Part No.	Qty.	Description
1.	4100028	1	Seal Kit
2.	4100029	1	Yoke
3.	4100031	2	Pin
4.	4100031	2	Key
5.	4100027	1	3-1/2 x 16 Cylinder Complete



Ref.	Part No.	Qty.	Description
1.	3600031	1	Power Take Off Assy., 540 RPM
	3600032	1	Power Take Off Assy., 1000 RPM
2.	3600003	1	Yoke, 540 RPM
	3600033	1	Yoke, 1000 RPM
3.	3600004	2	Repair Kit, U-Joint
4.	3600034	1	Male Shaft W/Yoke
5.	3600035	2	Ring, snap
6.	3600036	2	Washer, thrust
7.	3600037	2	Bushing, nylon
8.	3600038	1	Shield, outside half
9.	3600039	1	Shield, inside half
10.	3600040	1	Female Tube W/Yoke
11.	3600007	1	Yoke, rear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Ref.	Part No.	Qty.	Description
1.	3100125	1	Shaft, main 1-7/16" x 15" long
2.	3100126	1	Key, 1/4" x 3/8" x 4" long
3.	3100127	1	Bushing, sprocket
4.	3100128	2	Sprocket, 37 tooth
5.	3100129	1	Collar, shifting
6.	3100130	1	Drive Sleeve, external spline
7.	3100131	2	Elbow, reducing 3/4" x 1/4" NPT (90°)
8.	3100132	2	Snap Ring
9.	3100133	2	Barrel, shift cylinder
10.	3100134	4	O-Ring
11.	3100135	1	Shifting Fork and Plunger
12.	3100136	1	Cover, Gear Box
13.	3100137	1	Housing, gear box
14.	3100138	2	Bearing, 1-7/16" bore (Press Fit)
15.	3100139	1	Shaft, idler
16.	3100140	2	Washer, large
17.	3100141	2	Thrust Bearing, (Torrington)
18.	3100142	2	Bushing, bronze (2 Piece)
19.	3100143	4	Race, thrust bearing (Torrington)
20.	3100144	2	O-Ring, 1-1/4" ID x 1-1/2" OD
21.	3100145	2	Beveled Gear, With Bushings
22.	3100146	1	Gear and Shaft, pinion
23.	3100147	1	Key, 1/4" square x 1-1/2" long
24.	3100148	2	Link, connector (No. 80)
25.	3100149	1	Jam Nut, 1-1/4" (With Set Screw)
26.	3100150	2	Chain, roller (No. 80 4 Pitches)
27.	3100151	1	Collar, Camlock 1-1/4"
28.	3100152	2	Bearing, 1-1/4" (W/Collar)
29.	3100153	1	Gear Box Complete