

HIGHLINE
INC.

BALEMASTER

1993- 1994

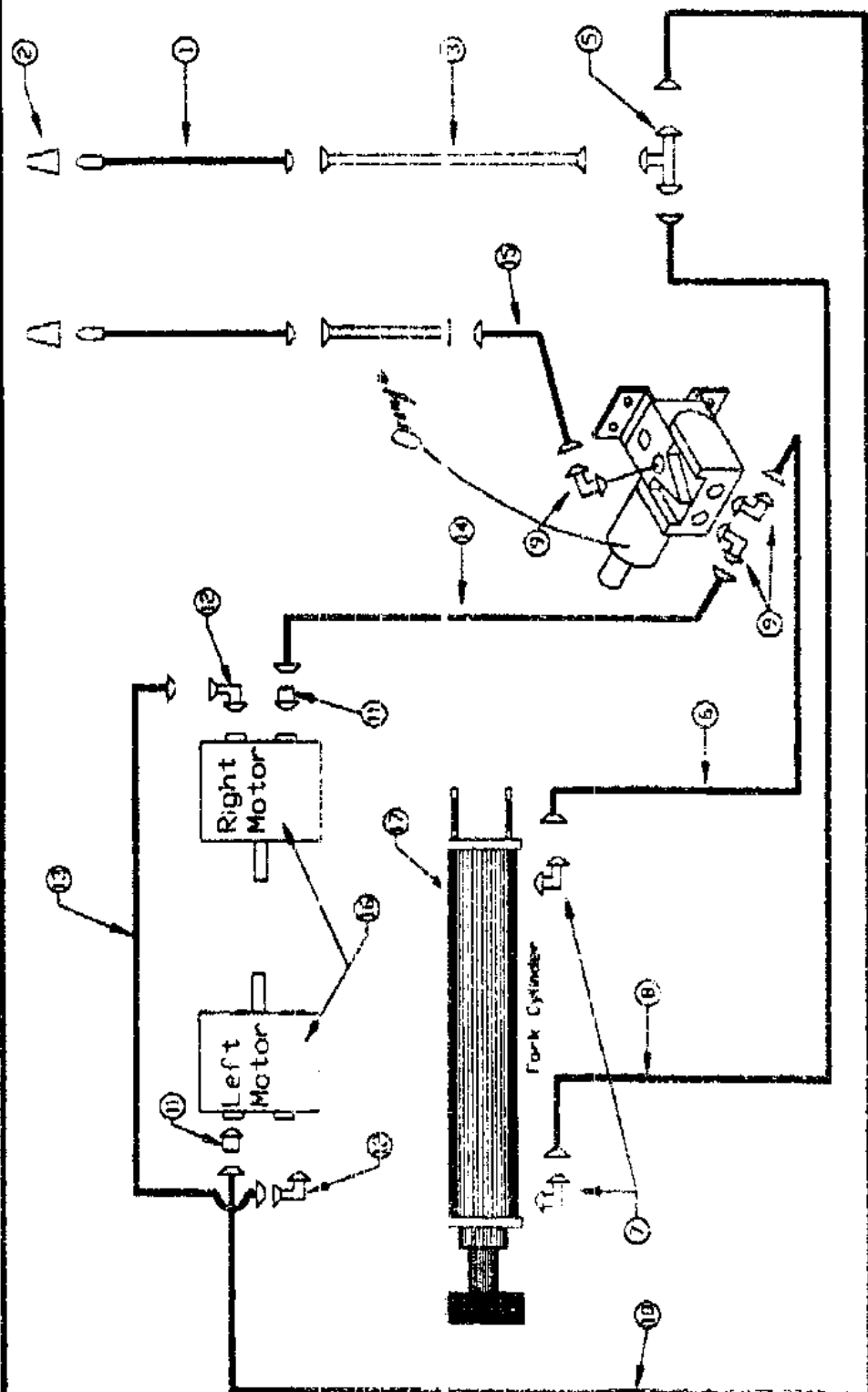
MODEL 700

**Assembly-Operator
Parts Manual**



Job	Part No.	Be Set to Don	Each	Part No.	Desc/Quan	each
24				12		
23				13		
22				14		
21				5		
20				2		
19						
18				6		
17				5		
16				4		
15				3		
14				15	601005	3/8x36 1/2x1.12 = 3/8x1.12 1000
13				16	601017	3/8x26 3/8x1.12 = 1/2x1.12 1000

High-Line Mfg. Inc.
Mandel, Dale Barker
Ref. Part:
Assembly Name:
Dale Power Hydraulic System
Part No: Figure 2

[illegible]

Revisions

High-Line Mfg. Inc.
Model: Bole Pro
Ref. Port:
Assembly Name: Bole Pro Loading Fork and Ball Motors Hydraulics
Part No.: Figure 1

Part No.: Figure 1



TO THE OWNER:

Congratulations on the purchase of your new HIGH-LINE 700 BALE MOVER.

Constructed of the finest quality materials, your HIGH-LINE 700 BALE MOVER is engineered and designed to do normal operations effectively, efficiently and to provide you with years of dependable service.

Be sure to read the instructions in this manual for adjusting and operating your 700 BALE MOVER. A few moments to acquaint yourself with the bale mover and its maintenance requirements will save you precious time in the field and protect your machinery investment. Should you in time need replacement parts, consult the parts list in this manual and contact your HIGH-LINE dealer.

High-Line Mfg. Inc.



Warranty Claim

High-Line Mfg. Inc. warrants its products to the original owner for a period of two years from date of purchase, subject to the following.

•1st year Parts & Labour

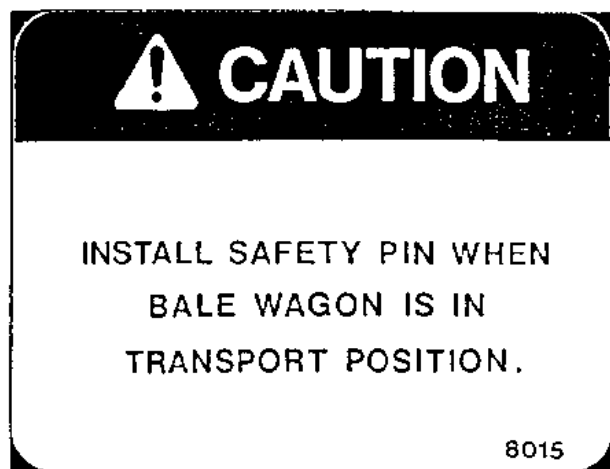
•2nd year Parts Only

- All matters related with the warranty of products must be handled through an authorized High-Line Manufacturing dealer.
- Any labour subject to warranty must be authorized by a High-Line Mfg. Inc. representative before work is started.
- Machines used for rental, custom work, industrial or construction use will be warranted for a period of 30 days from date of purchase. (Parts and Labour)
- Warranty will be void if any component of this machine is altered or modified in any way, unless written permission is given by High-Line Mfg. Inc.
- High-Line Mfg. Inc. will not assume any responsibility for whatever damage may occur to equipment to which this machine may be attached.
- Warranty terms and conditions are subject to provincial and state legislation.

IMPORTANT

Please read entire manual before you operating your 700 Bale Mover

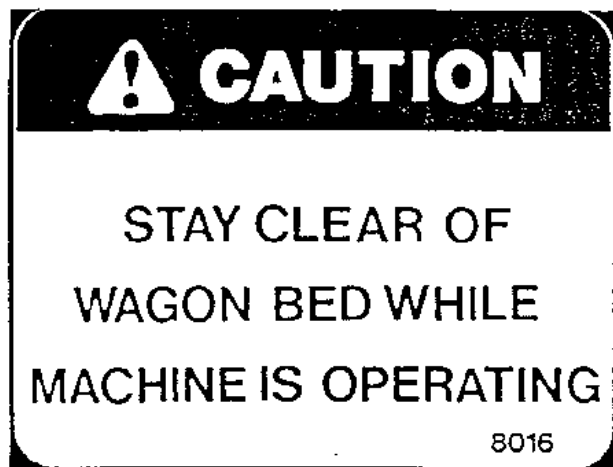
SAFETY



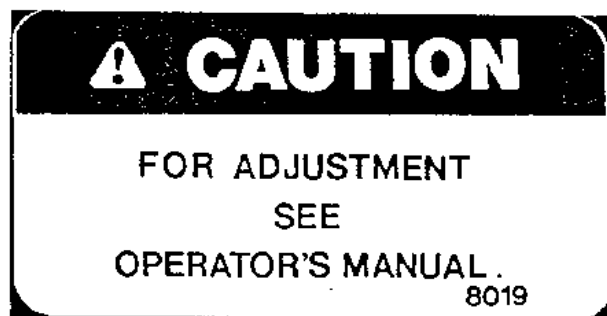
OUTSIDE BED RAILING



RIGHT SIDE OF SUB FRAME



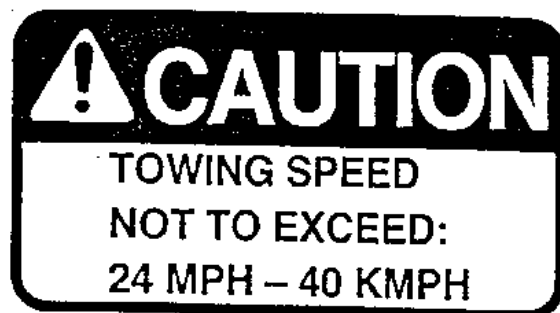
FRONT SIDE OF SUPPORT



FRONT CROSS MEMBER



RIGHT SIDE OF SUB FRAME



FRONT CROSS MEMBER

8321

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SPECIFICATION

SHIPPING WEIGHT----- 3600 lbs.

TOTAL LENGTH----- 41 feet

BED LENGTH----- 37 feet

TOTAL WIDTH----- 8 feet

BED WIDTH----- 2'11"

TOTAL HEIGHT ----- 9'2"

BED HEIGHT----- 2'8"

GROUND CLEARANCE----- 14"

MAXIMUM CAPACITY----- 7 - 5 foot Bales

CONVEYOR CHAIN----- Heavy Duty ASA 2062 1½ Pitch

TIRES----- 4 - 9.5L x 15 x 8 ply c/w tube & 40 PSI Highway Service

UNDERCARRIAGE----- 2 - 2 Wheel Walking Axle

HORSE POWER REQUIRED ----- 60 Horse Power

HYDRAULIC OUTLETS ----- 2

ASSEMBLY

1. SITE SELECTION

Prior to assembly, select an area which is clean, level and large enough to accomodate assembled Bale Mover.

2. ORIENTATION

Left and right are determined when standing behind the machine facing the direction of travel.

3. REQUIRED TOOLS AND EQUIPMENT

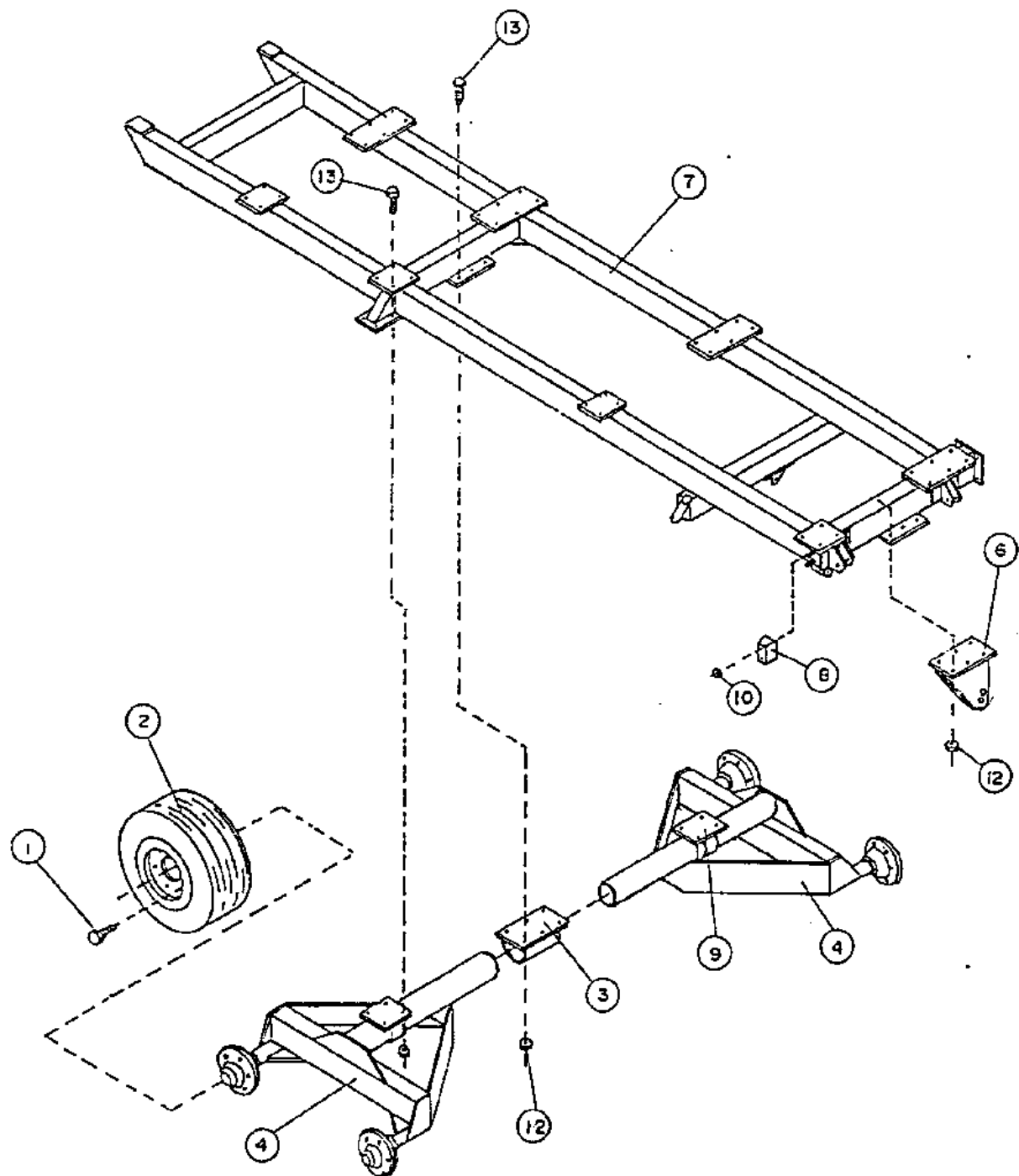
Before beginning assembly of the Bale Mover, have the following equipment on hand:

1. Fork lift or hoisting equipment with lifting capacity of 500 lbs.
2. Wrenches: 1/2, 9/16, 3/4, 7/8, 15/16, 1, 1 1/4".
3. Wire cutters
4. Pliers
5. Ball peen hammer
6. Pry Bar
7. Aligning bar

CAUTION: SOME BALE MOVER COMPONENTS ARE EXTREMELY HEAVY.
HAVE HOISTING EQUIPMENT AVAILABLE WITH A LIFTING
CAPACITY OF 500 POUNDS FOR ASSEMBLY OF PARTS.

4. Open packing case and check contents against parts list in this book.
5. Before beginning to assemble Bale-Mover ensure that all parts are accounted. Check against parts list in this book.

Main Sub Frame

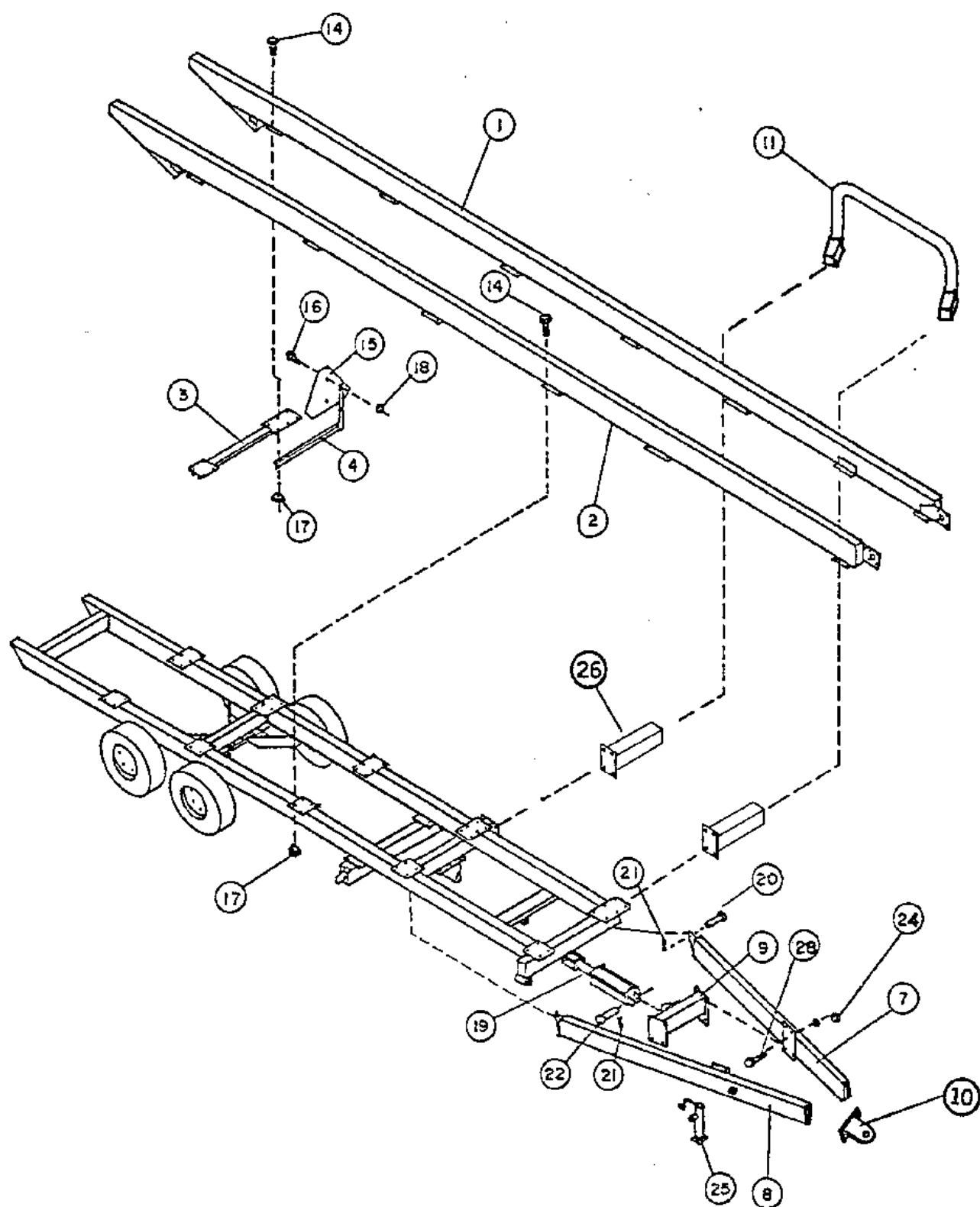


MAIN SUB FRAME

NOTE: DO NOT TIGHTEN BOLTS UNTIL ASSEMBLY IS COMPLETE.

1. Bolt centre pocket #3 to sub-frame #7 with 5/8" x 1 3/4" bolt.
2. Position the centre pocket #3 and the walking beam end #4 and bolt side pockets #9 to sub-frame #7 with 5/8" x 1 3/4" bolt #19.
3. Mount wheels to walking beam #4 with 1/2" wheel bolt #1.
4. Install #6 cylinder bracket complete with 5/8" x 1 3/4" bolt #13.
5. Bolt rubber bumper #8 to sub-frame #7 with 7/16" locknut #10.

A-Frame Hitch and Rail Assembly



A-FRAME HITCH and RAIL ASSEMBLY

A-FRAME HITCH TO SUB FRAME

1. Position right #8 and left #7 A-frame hitch to sub frame. Secure with pins 1 1/4" x 3" #20".
2. Assembly hitch cross member #9 left and right hitch with 1/2" x 1 1/2" bolts #28.
3. Install hitch plate #10 in lower holes to hitch with 1 x 7 1/2" bolt.
4. Tighten bolts on hitch cross member.

INSTALLATION OF RAILS

1. With hoisting equipment, place rails on sub-frame and fasten with 1/2 x 1 1/2" bolt.

CAUTION: Due to length of rail, to avoid damage and personal injury, caution should be exercised when lifting member into place

INSTALLATION OF CROSS MEMBER

1. Bolt rear cross member #3 to back of the rails.

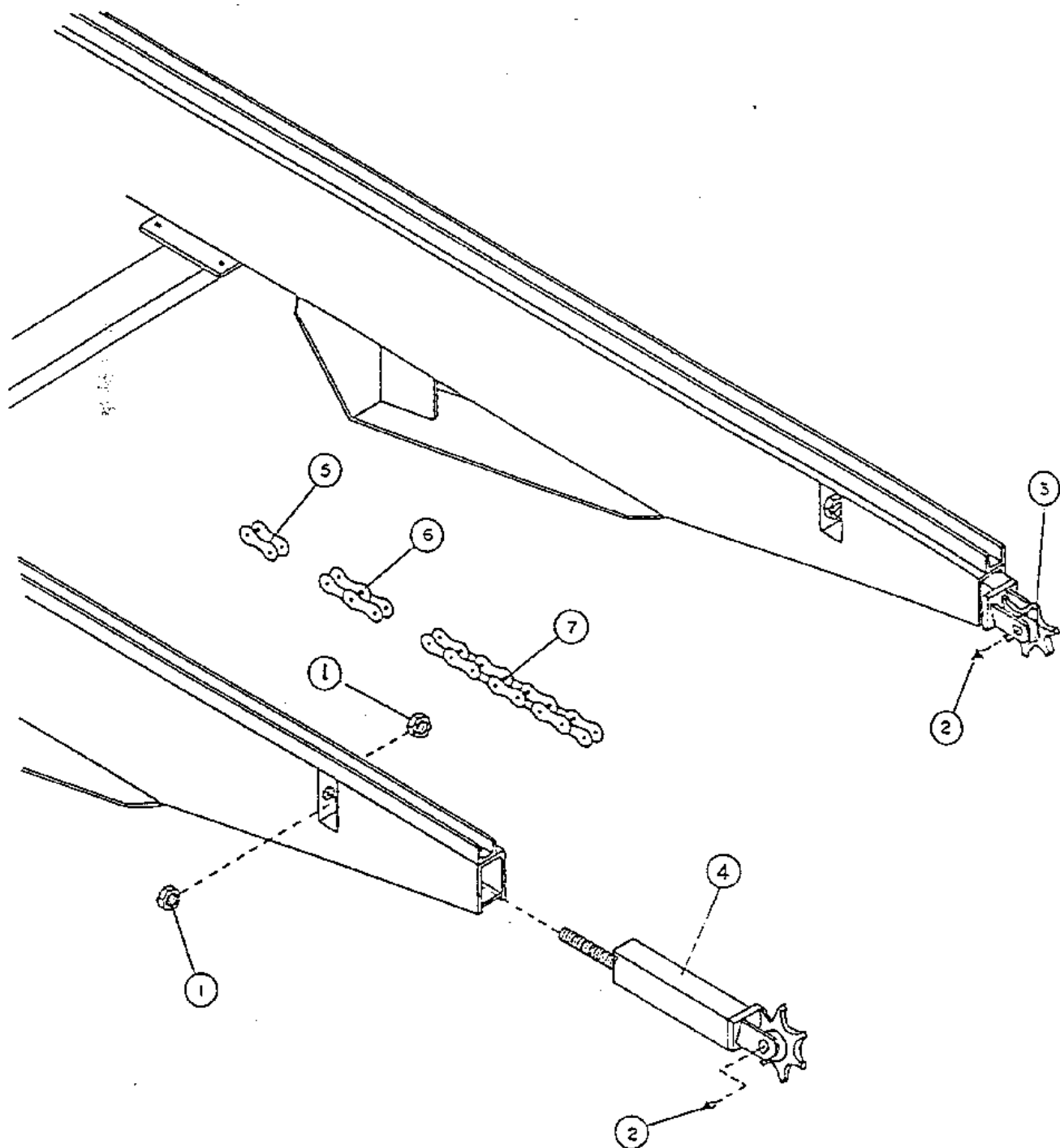
INSTALLATION BALE STOP

1. Bolt bale stop attachment plate #26 to the sub frame with 1/2 x 1 1/2" bolts and 1/2" lock nuts, then slip #11 onto #26 with 1/2 x 1 1/2" bolt.

INSTALLATION OF SLOW MOVING SIGN

1. Bolt slow moving sign to bracket #4 with 1/4 x 3/4" bolts #16. Attach slow moving sign to rear cross member #3 with 1/2 x 1 1/2" bolt #14.

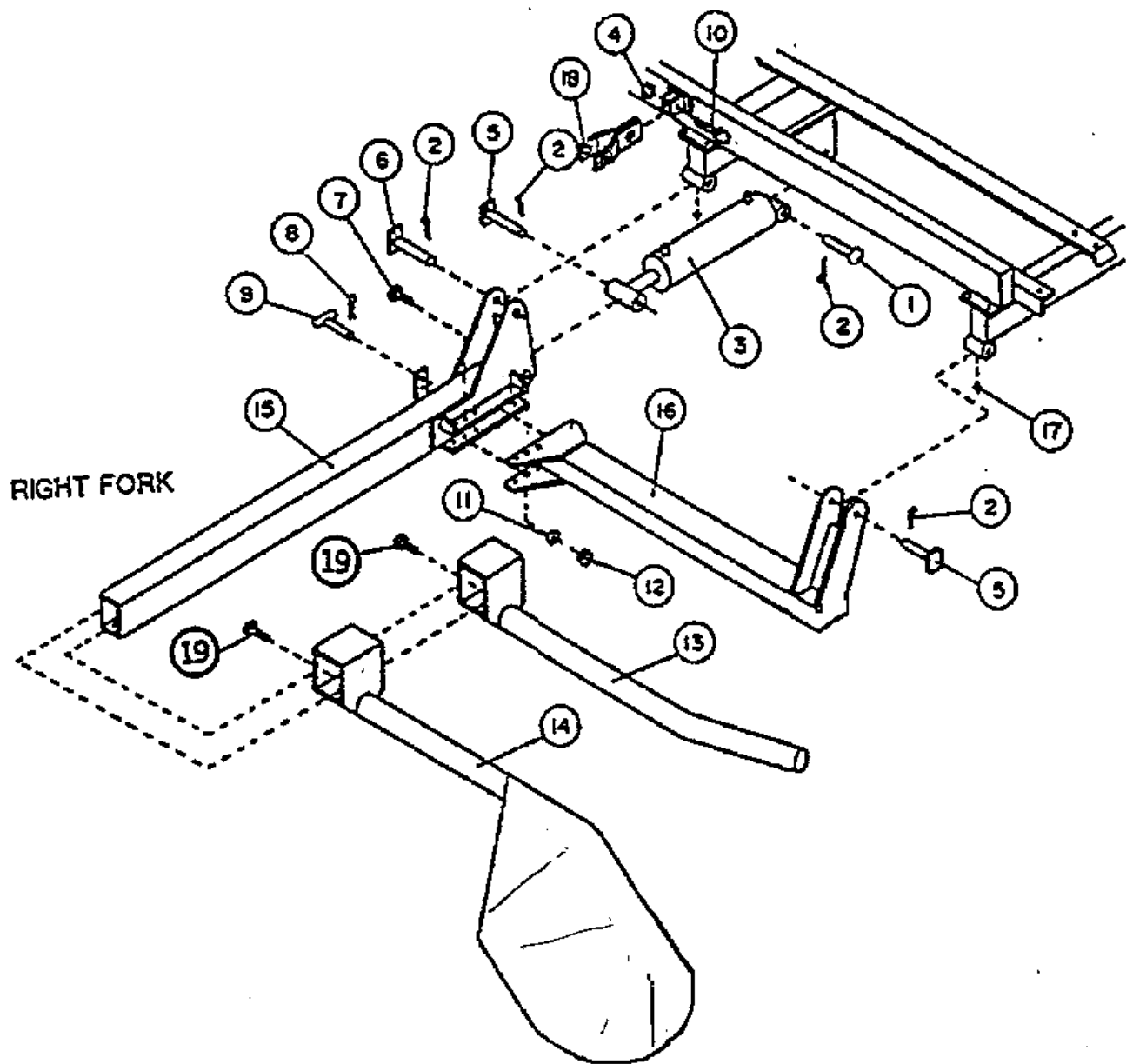
Chain Tightener



ROLLER CHAIN INSTALLATION

1. To install roller chains, refer to drawing on opposite page.
2. Thread all chain tighteners into rail and tighten with 5/8" nut #1 to other side of plate.
3. Insert into entire length of rail either fish line or 1/4" rod. Unroll chain length #7 on the rail channel from the rear, unrolling towards the front. Fasten the roller chain to the fish line and proceed to pull chain through. Unroll #7 roller chain on top of rails. Secure both ends with a connecting link #6 or half link #5.
4. To adjust the roller chain on each rail, grasp the chain on centre and lift. The chain should have an 8" lift, or check inside tubing and chain should be lifted about 2" from bottom of tube. To adjust, move chain tightener in direction which is needed.

Fork Assembly



INSTALLATION OF BALE FORK TO SUB FRAME

1. Place pivot slide arm right #15 under 4 x 6 cross member. Secure slide arm to cross member with 1 1/4" x 6 3/4" pin #6 and cotter pin #2. Secure bolt fork lock end #18 with 3/4" x 2 1/2" bolt #10.
2. Place pivot arm right #16 under front cross member. Secure pivot arm to cross member with 1" x 6 3/4" pin #5 and cotter pin #2. Secure right slide arm to right pivot arm with 5/8" x 1 1/2" bolt #7, lock washer #11 and nut #12.

INSTALLATION OF FORK TEETH

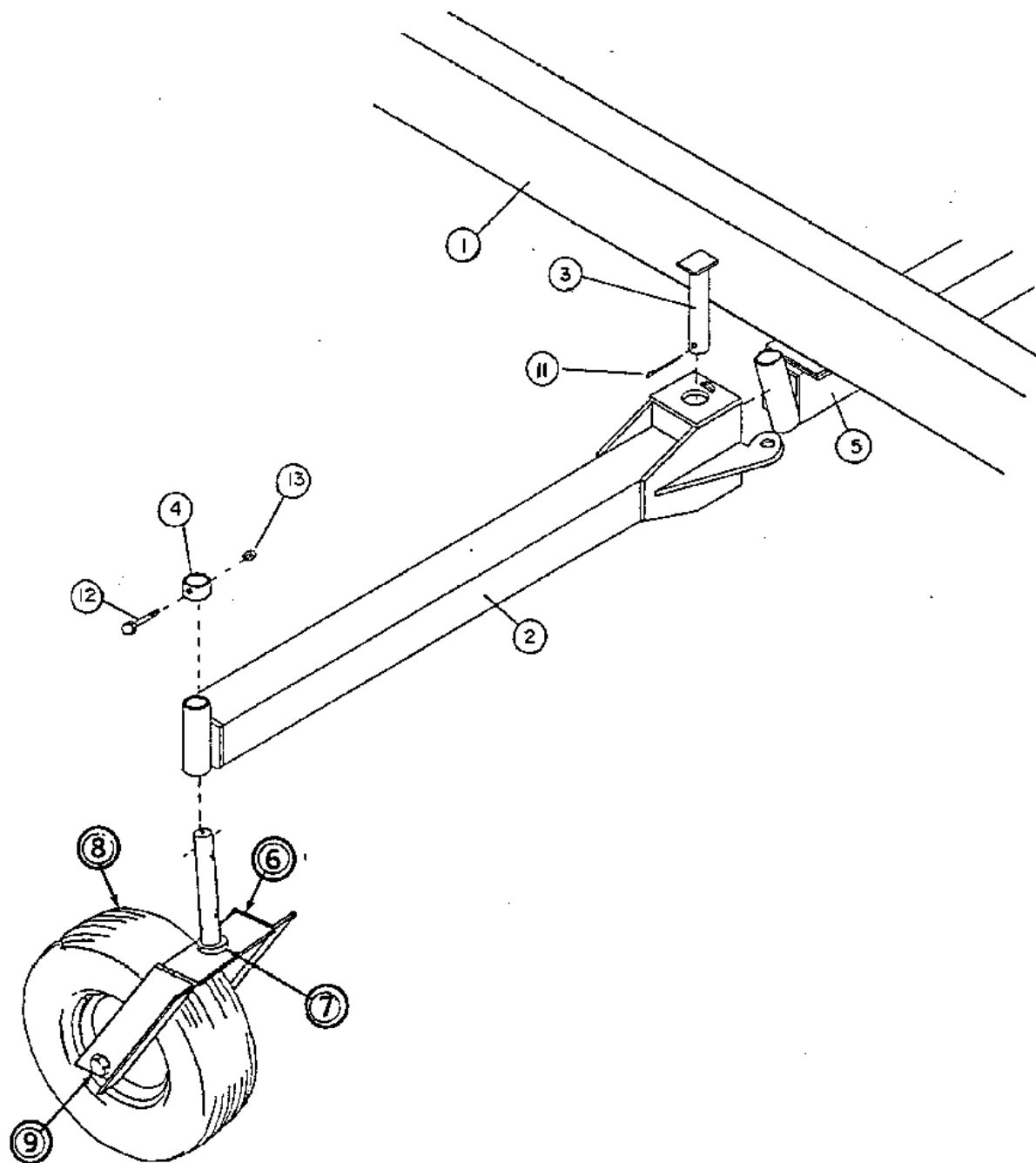
1. Lift and block pivot slide arm about four to six inches above the ground. Slide left fork #13, part #40023 onto the frame. Tighten with 1 x 2" bolt #19. Next slide front fork #14, part #40022 onto the frame. Tighten with 1 x 2" bolt #19.
2. To adjust fork teeth, place fork in locked transport position. Adjust inside fork tooth higher than outside rail. Tighten bolts. Depending on bale size and condition, adjust outside fork tooth to suit round bale.

FORK CYLINDER INSTALLATION

1. Secure 3 1/2" x 13" cylinder #3, base plate of cylinder in cylinder gussets on 4 x 6 cross member. Secure with 1" x 6" pin #1 and cotter pin #2. Ports to be upward.
2. Install cylinder to pivot slide arm and secure with 1" x 6 3/4" pin #5 and cotter pin #2.

NOTE: INSTALL RESTRICTED ELBOW TO ROD END OF CYLINDER.

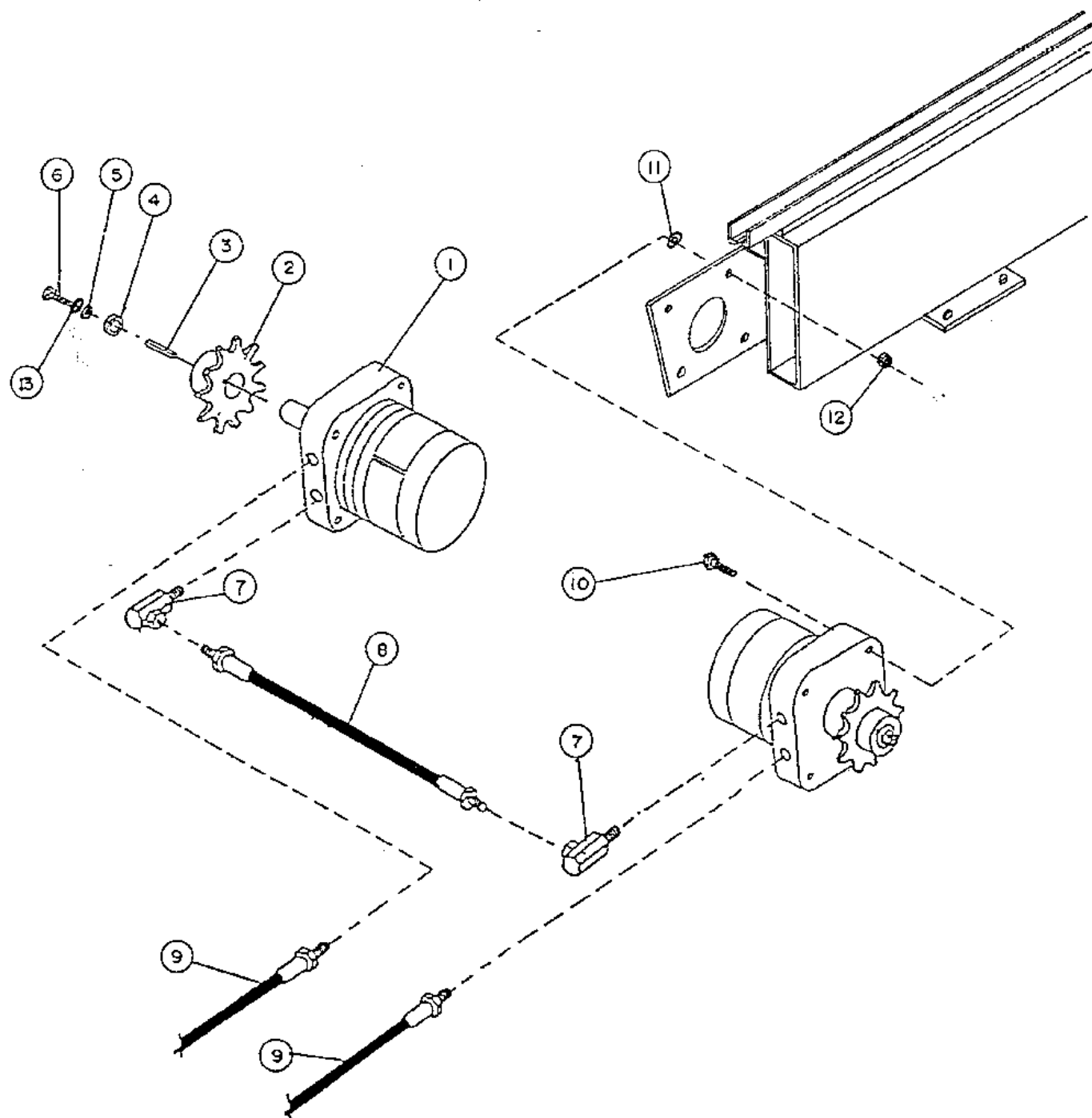
Support Arm Assembly



INSTALLATION OF SUPPORT ARM

1. Drop pin #3 in hole at the rear of the support arm #2, and put in cotter pin #11.
2. Attach support arm wheel bracket #6 to the end of the support arm #2. Put collar on to end of shaft and put bolt 1/4" x 2 1/2" in with locknuts.
3. Attach supplied wheel to castor fork with a 1 X 9" unc bolt.

Hydraulic Motors



HYDRAULIC MOTORS

1. Secure hydraulic motors #1 to rails #45051 and #45052, as shown on page 3, complete with 1/2" x 2 1/2" bolts #10, and 1/2" locknut #12.

NOTE: The 1/2" washers #11 are supplied to shim motor to centre sprocket with channel, if required.

2. Place sprocket #2 and keystock #3 on shaft of hydraulic motor. Install end washer #4, 5/8" flatwasher #13, 5/8" lockwasher #5 and bolt with 5/8" x 1" NF #6.
3. Left motor has a 90° swivel elbow #7 in the top port and is attached to hose #8. The bottom port has a hose #19 which attached to the tractor.
4. Right motor has a 90° swivel elbow #7 in the bottom port and is attached to hose #8. The top port has a hose #9 which attached to the tractor.

INSTALLATION of HYDRAULIC HOSE and LINES

IMPORTANT: All hoses are different lengths, so refer to lengths on page 34.

NOTE: When finished installing hydraulic hoses to preassembled valve assembly, make sure to follow set-up as shown on opposite page.

1. Install tilt cylinder #16. Secure elbow #3 to cylinder. Attach #8 hose to #2 and it to the top rear port on the cartridge valve as shown. Attach #15 hose to elbow #3 and the opposite end connects to male tee #13.
2. The tractor hose #1 is attached to elbow #2 to the upper side of cartridge valve #14. The second tractor hose is attached to male tee #13.
3. Hose #11 attaches to the top front port on the cartridge valve as shown and the opposite end attaches to port D of the double tee block #6. The second hose also number #11 connects male tee #13 to port E of the double tee block #6.
4. Install fork cylinder #12. Attach pilot check valve #7 to the cylinder. Attach #19 to the opposite end of the cylinder, then attach #18 to #19. On top of #18 mount the double tee block #6 through port C.
5. Secure hose #4 to Port G of #6 and the opposite end connects to the 1/4" swivel elbow #17. Connect #17 to the top of pilot check valve #7 as shown. Mount hose #5 to the side of check valve #7 and the opposite connects to port F of #6.
6. Install support wheel arm cylinder #10 in cylinder ports. Secure elbow #3 in both ports of cylinder #10.
7. Hose #9 attaches to elbows #3 on the wheel arm cylinder and connect to ports A and B of #6 as shown.

PRE-OPERATION ASSEMBLY

CAUTION: To fill hydraulic hoses and cylinders with oil, proceed as follows.

1. Install fittings to hose ends, connect hoses to tractors.
2. With fork still in down position, carefully operate controls allowing oil to flow to fork cylinder.

OPERATION

OPERATION

- A. Operate Bale Mover only from tractor.
- B. The model High-Line 700 BALE MOVER is designed for maximum work efficiency with minimum operator fatigue. An unfamiliar operator should spend time to learn the operating characteristics of the machine. A period of careful practice is recommended which will reward you with safe and efficient operation.
- C. The tractor should be of 60 H P class or larger and must have a good hydraulic working system, 2000 PSI with 15-20 gallons per minute.

MODE OF OPERATION

The High-Line 700 BALE MOVER is able to pick up and transport 7 - 1500 pound bales. Follow the mode of operation below.

CAUTION: BEFORE OPERATING HYDRAULICS, REMOVE LIFT FORK SAFETY PIN.

1. Approach the round bale with the right fork in the lowered position. Advance till the bale rests firmly between the lift fork teeth. Raise the fork, until the bale falls onto the mover bed.
2. Roll back 1 loaded bale just far enough to make space to load next bale. The lift forks may have to be lowered slightly for larger bales.

UNLOADING BALES

IMPORTANT: Depending on Bale size, in some cases, to enable the loaded bale to move past the fork, the fork may have to be lowered slightly.

1. To activate cartridge valve simply switch up toggle switch. The toggle switch in the down position activates the fork arm.
2. With the conveyor down, advance tractor at same speed as chain.

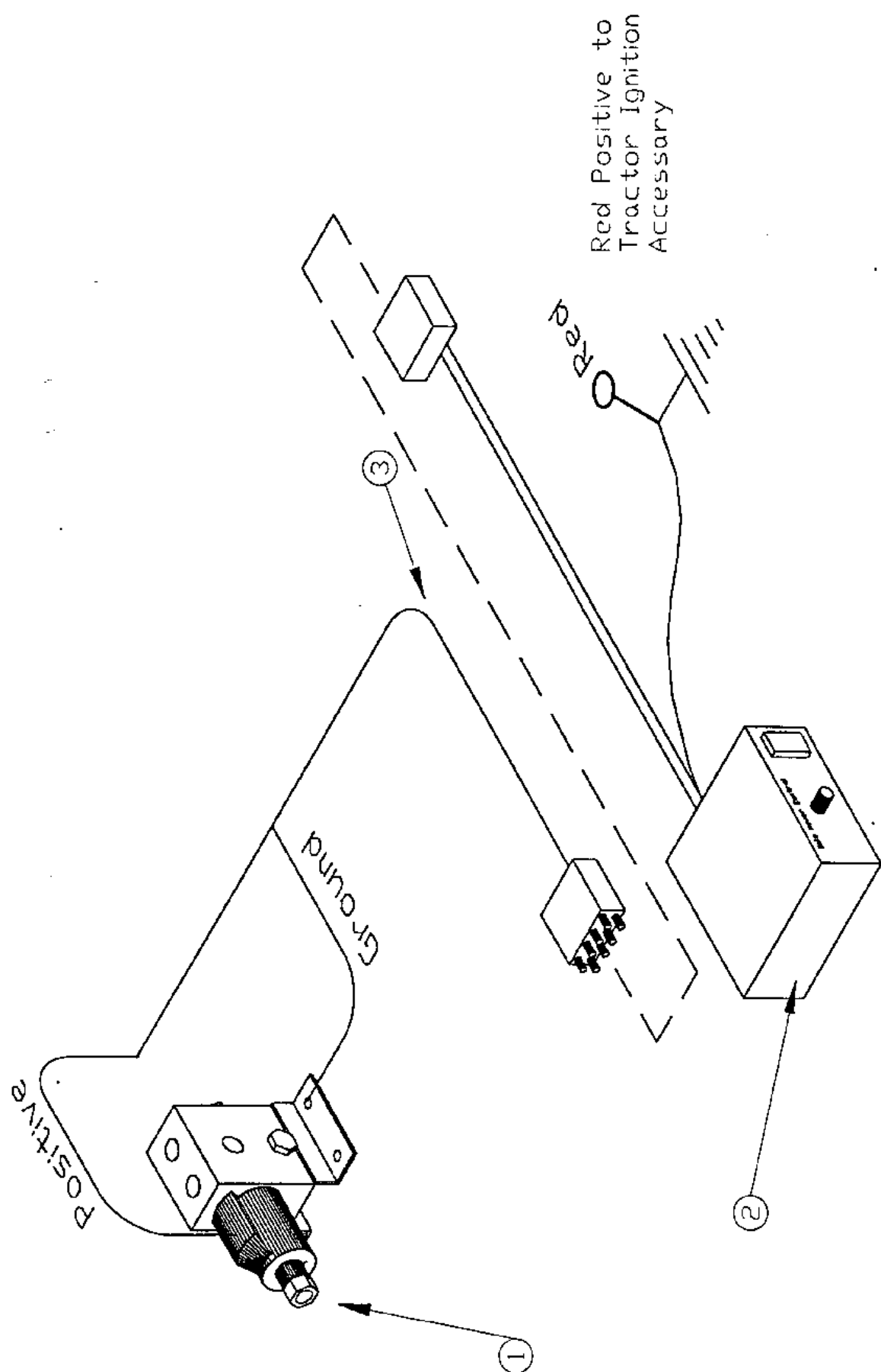
IMPORTANT: THE SPEED OF TRACTOR ADVANCEMENT AND CHAIN SPEED MUST BE KEPT CONSTANT, OTHERWISE THE DRIVE CHAIN WILL CUT BALE STRINGS OR CAUSE IMPROPER BALE SPACING.

TROUBLE SHOOTING



<u>SYMPTON</u>	<u>PROBABLE CAUSE</u>	<u>REMEDY</u>
1. Strings cut when unloading	*Tractor chain speed uneven *Inside lift fork too low	*Keep tractor & chain speed constant. *Raise fork accordingly
2. Chain falls from track	*Chain not tight *Forks too close to mover bed	*Tighten chain as on Page 5. *Raise inside lift fork
3. Chains twist or lean	*Pressure from bales caused by side loading	*Straighten with bar *Raise lower fork so bale will clear side rail.
4. Bed deck does not raise	*Low oil *Poor electrical connection *Needs seal kit	*Check tractor reservoir *Check wiring *Replace kit

Electrical System (Spring 1994)



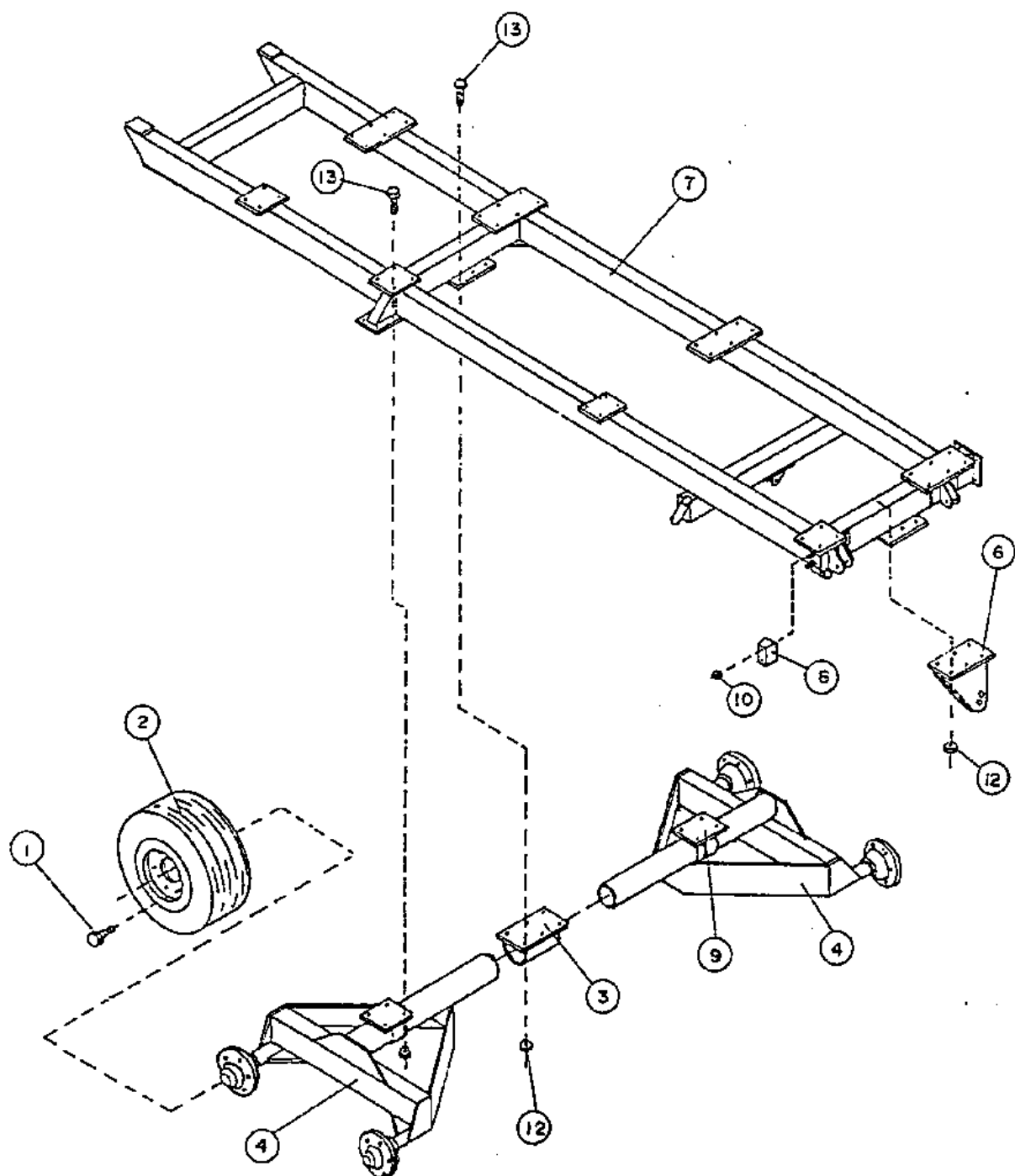
PARTS CATALOGUE

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CHAIN TIGHTENER	25
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SUPPORT ARM ASSEMBLY	29
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HYDRAULIC ASSEMBLY	33
611 HUB & SPINDLE	35
211 HUB & SPINDLE	37
3 1/2" x 13" CYLINDER	39
3" x 8" CYLINDER	41
3" x 10" CYLINDER	43
ELECTRICAL SYSTEM	45

NOTE: 5 BALE MOVER PARTS ARE THE SAME AS A 7 BALE MOVER WITH
THE EXCEPTION OF THE FOLLOWING LIST:

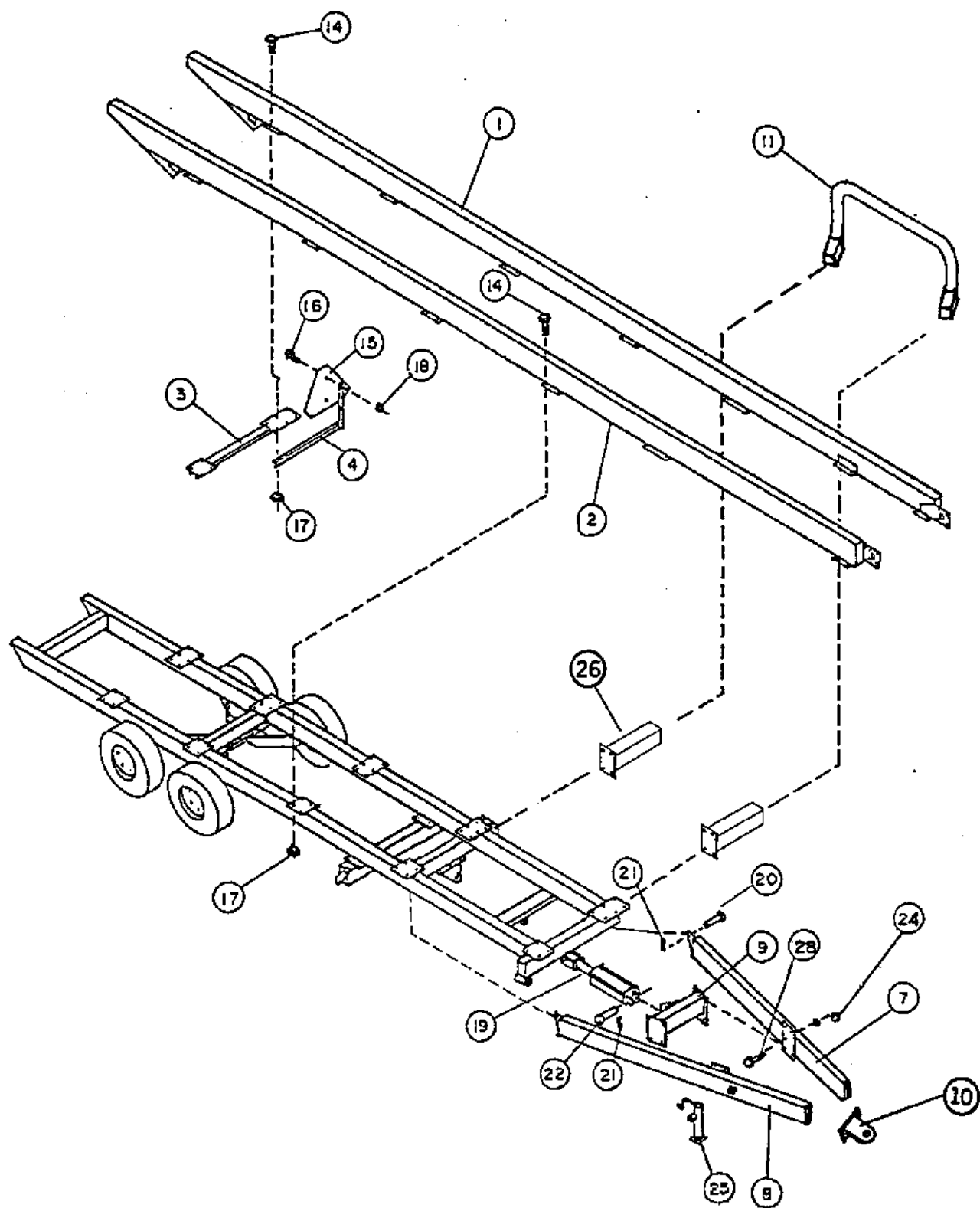
- 91514 5 BALE MOVER 25' CHAIN
- 45063 5 BALE MOVER LEFT RAIL
- 45064 5 BALE MOVER RIGHT RAIL

Main Sub Frame



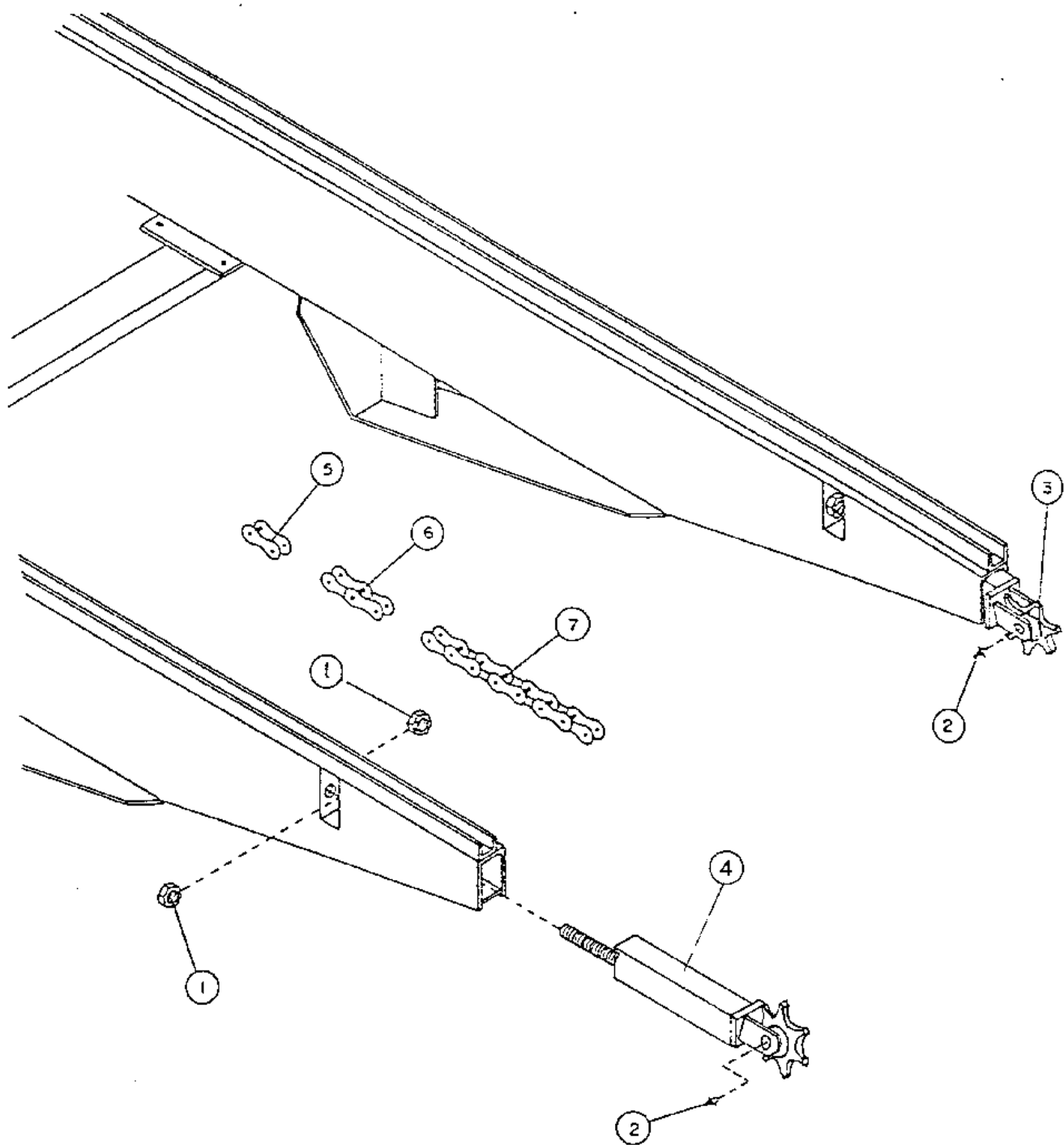
ITEM	PART NUMBER	DESCRIPTION	No
1	91060	Wheel Bolt 1/2"	24
2	91008	11-15lt 8ply Farm Hiway service tire	4
3	45006	Centre Pocket	1
4	45004	Walking Beam	2
5	45002	Stabelizer Mount	1
6	45033	Cylinder Bracket	1
7	45128	Main Sub Frame	1
8	92061	Rubber Bumper	1
9	45007	Side Pockets	2
10	LNC08P	Locknut 1/2"	10
11	B5C0824P	1/2 X 1 1/2" bolt	8
12	LN5C10P	Locknut 5/8"	20
13	B5C1024P	Bolt 5/8" x 1 1/2"	20

A-Frame Hitch and Rail Assembly



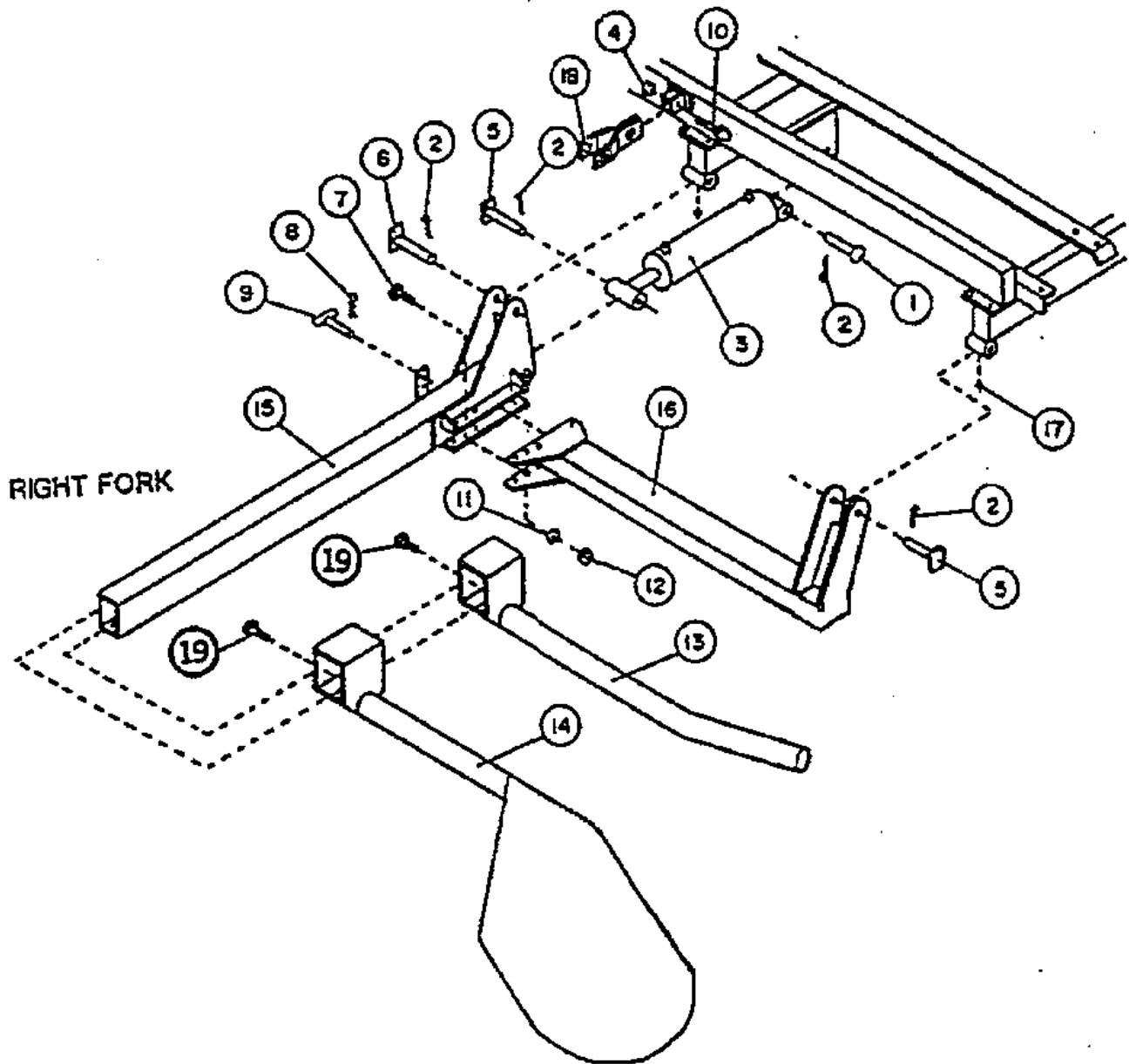
ITEM	PART NUMBER	DESCRIPTION	QTY
1	45051	Left Outside Rail	1
2	45052	Right Outside Rail	1
3	45008	Rear Cross Member	1
4	45022	Slow Moving Sign	1
7	45011	Left A-Frame Tube	1
8	45010	Right A-Frame Tube	1
9	45012	A-Frame Cross Member	1
10	45058	HITCH TONGUE	1
11	45016-A	Bale Stop	1
13	W10P	Lockwasher 5/8"	6
14	B5C0824P	BOLT 1/2 X 1 1/2"	88
15	92040	Slow Moving Sign	1
16	B5C0412P	Bolt 1/4" x 3/4"	2
17	LNC08P	Locknut 1/2"	88
18	LN5C04P	Locknut 1/4"	2
19	90712	Cylinder 3" x 10"	1
20	40003	A-Frame Pin 1 1/4" x 3"	2
21	CPO440	Cotter Pin 1/4" x 2 1/2"	4
22	91603	Pin Cylinder	2
24	LN5C08P	Locknut 1/2"	1
25	92033	Hitch Jack	9
26	45059	Bale Stop Mounting Arm	1
27	LNC16P	1" Locknut	1
28	B5C0824P	Bolt 1/2" x 1 1/2"	2
29	B5C16120P	1 x 7 1/2" UNC BOLT	1
10	45060	Double Hitch Tongue (optional)	

Chain Tightener



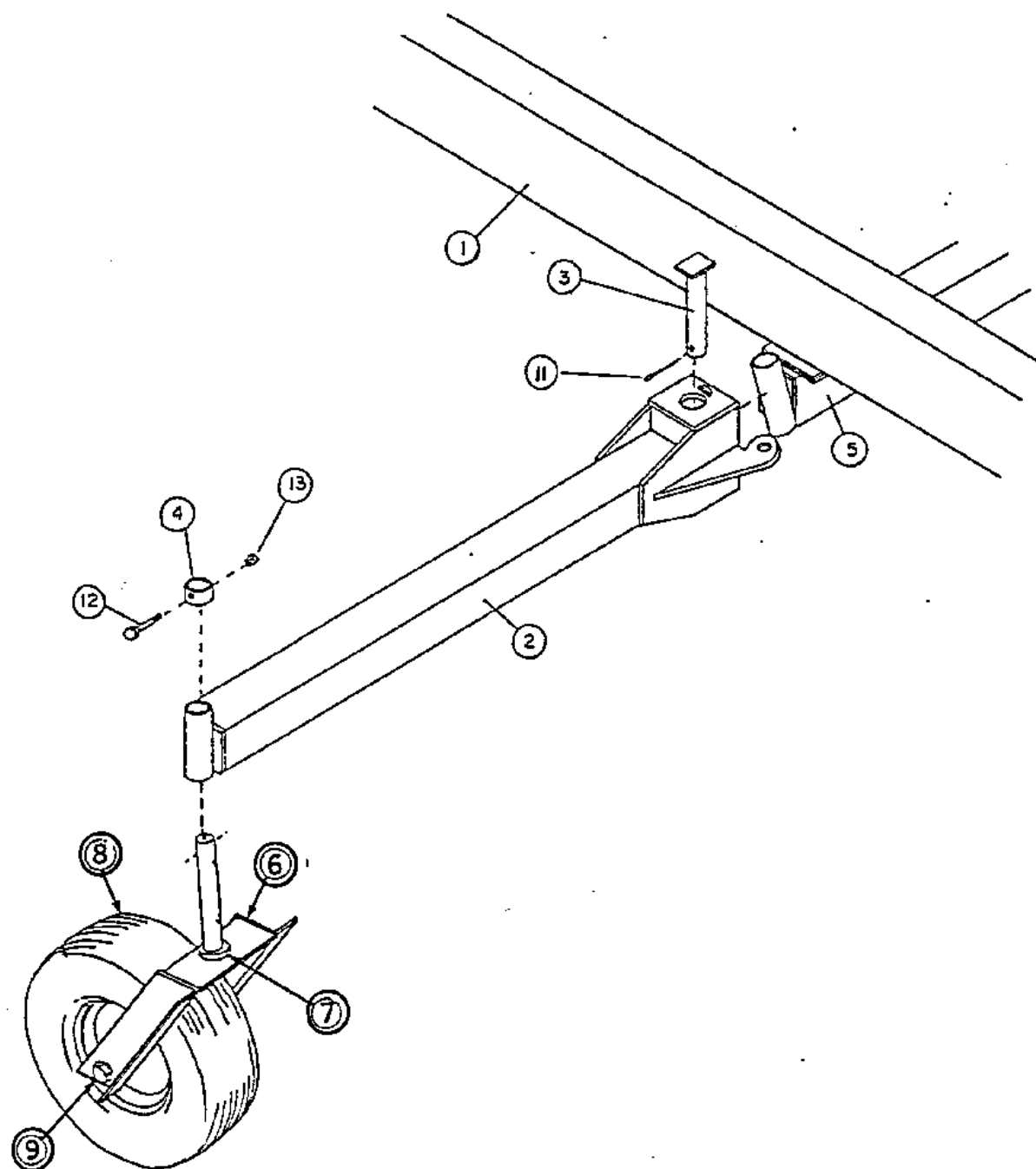
ITEM	PART NUMBER	DESCRIPTION	NO
1	N5C10P	Nut 5/8"	4
2	91700	Grease Nipple 1/8" NPT Straight	4
3	40073	Right Chain Tightener	2
4	40074	Left Chain Tightener	2
5	91511	2062 Half Link	*
6	91510	2062 Connecting Link	*
7	91508	2062 Chain c/w Connecting Link	54
	31316	* As Required ROLLER LINK 2062	

Fork Assembly



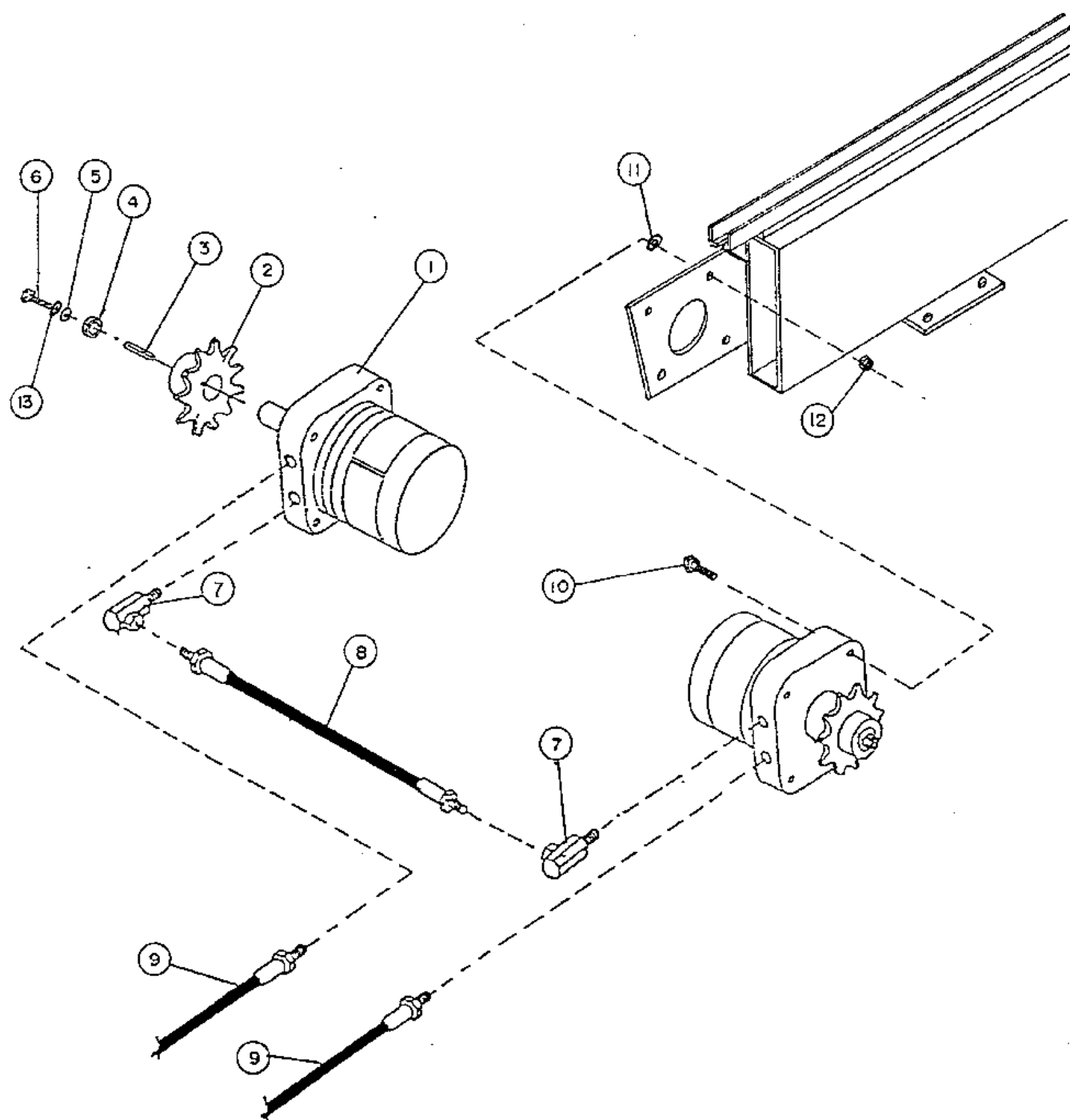
ITEM	PART NUMBER	DESCRIPTION	Nº
1	40009	Cylinder Bracket Pin	1
2	CP0440	Cotter Pin 1/4" x 2 1/2"	4
3	90120	Cylinder 3 1/2" x 13"	1
4	LN5C12P	Locknut 3/4"	1
5	40008	Front Pivot Arm Pin	2
6	40010	Pivot Slide Arm Pin	1
7	B5C1024P.	5/8" x 1 1/2" bolt	1
8	HF40	Hair Pin Clip 2 1/2"	10
9	40019	Pivot Slide Arm Lock Pin	1
10	B5C1240P	Bolt 3/4" x 2 1/2"	1
11	W10P	Lock Washer 5/8"	8
12	N5C10P	Nut 5/8"	8
13	40080	Right Short Fork	1
14	40079	Right Paddle Fork	1
15	40018	Right Pivot	1
16	40012	Right Pivot Arm	1
17	91700	Grease Nipple 1/8" NPT Straight	2
18	45023	Fork Locking Extention	1
19	B5C1632P	1 x 2" bolt	

Support Arm Assembly



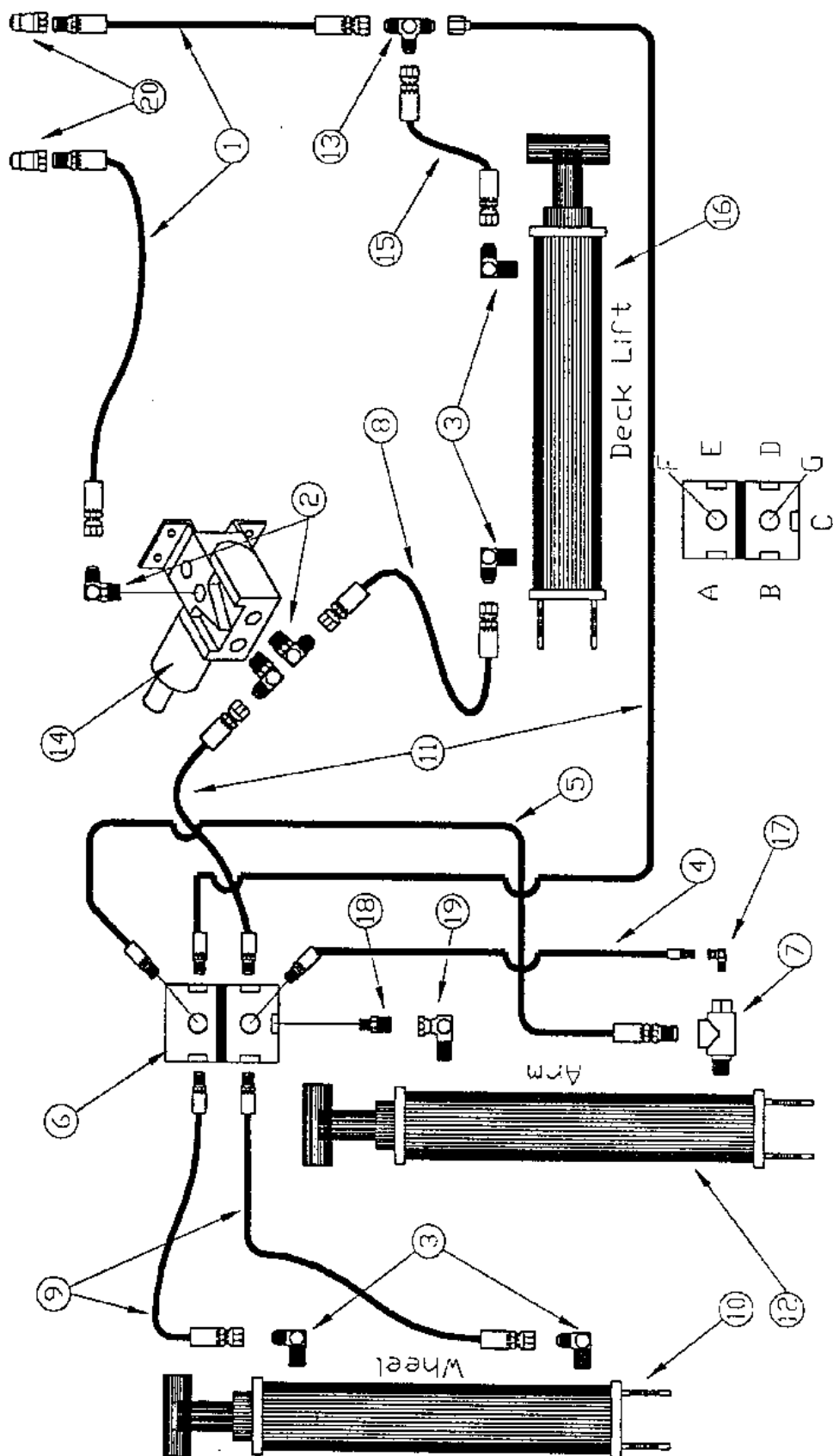
ITEM	PART NUMBER	DESCRIPTION	No
1	45047	Main Sub Frame	*
2	45003	Support Arm	1
3	45025	Support Arm Pin	1
4	45026	Support Arm Collar	1
5	45002	Support Arm Bracket	1
6	500007	Castor Fork	1
7	45061	Castor Fork Spacer	1
8	301210	Castor Tire And Rim	1
9	B5C16144P	1 X 9" Bolt "	4
11	CPO440	Cotter Pin 1/4" x 2 1/2"	4
12	B5C0540P	Bolt 5/16" x 2 1/2"	1
13	LN5C05P	Locknut 5/16"	3

Hydraulic Motors



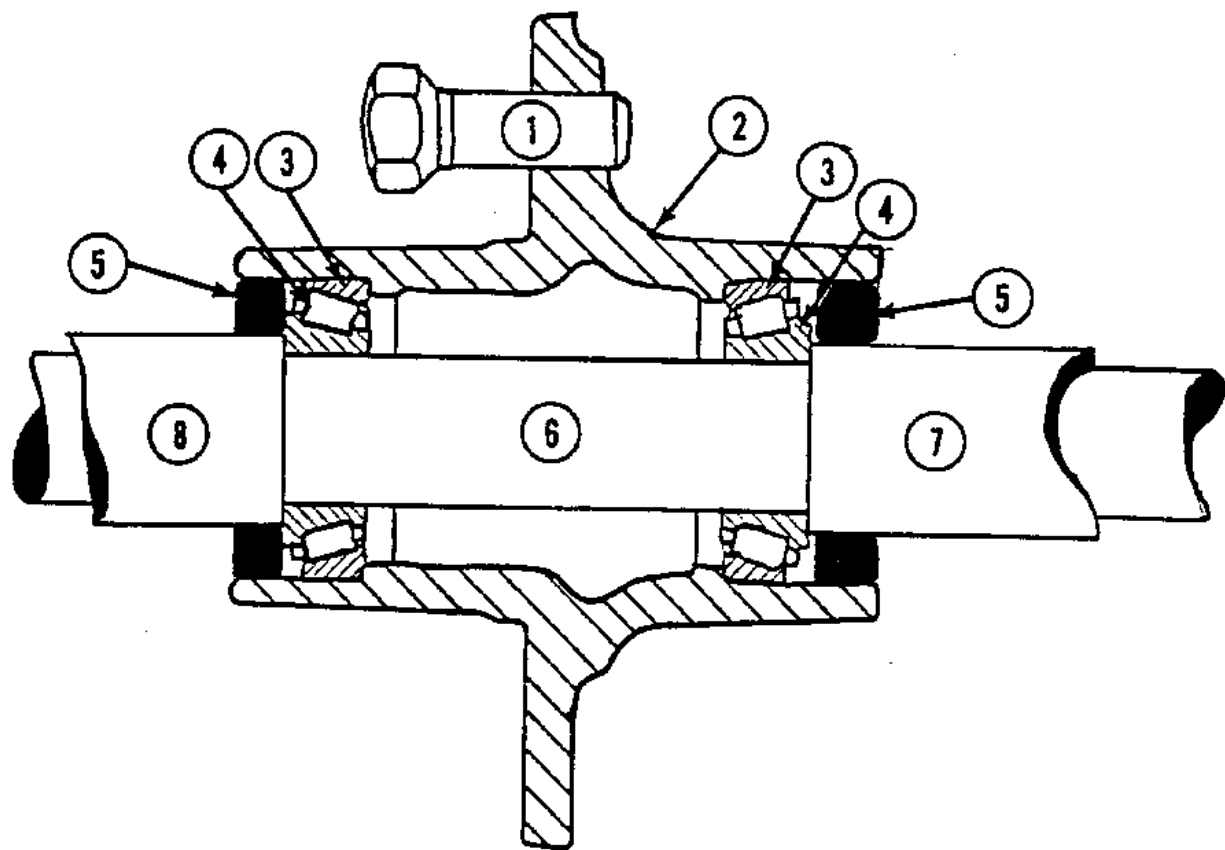
ITEM	PART NUMBER	DESCRIPTION	NO.
1	92066	HYDRAULIC MOTOR	2
2	92063	C-2062 - 10 TOOTH SPROCKET	2
3	40078	5/16" KEYSTOCK	2
4	40077	END WASHER	2
5	LW10P	5/8" LOCKWASHER	2
6	92067	5/8" x 1" BOLT	2
7	90507	90 deg. SWIVEL ELBOW 60MB 08MB	2
8	90216	1/2" x 60" HOSE 08MNPT X 08 MNPT	2
9	90310	1/2" x 96" HOSE 10MORB X 08MNPT	2
10	B5C0840P	1/2" x 2 1/2" Bolt UNC Gr. 5	2
11	FW08P	1/2" FLATWASHER	2
12	LNC08	1/2" LOCKNUT UNC	
13	FW10P	5/8" FLATWASHER	2

Hydraulic Assembly



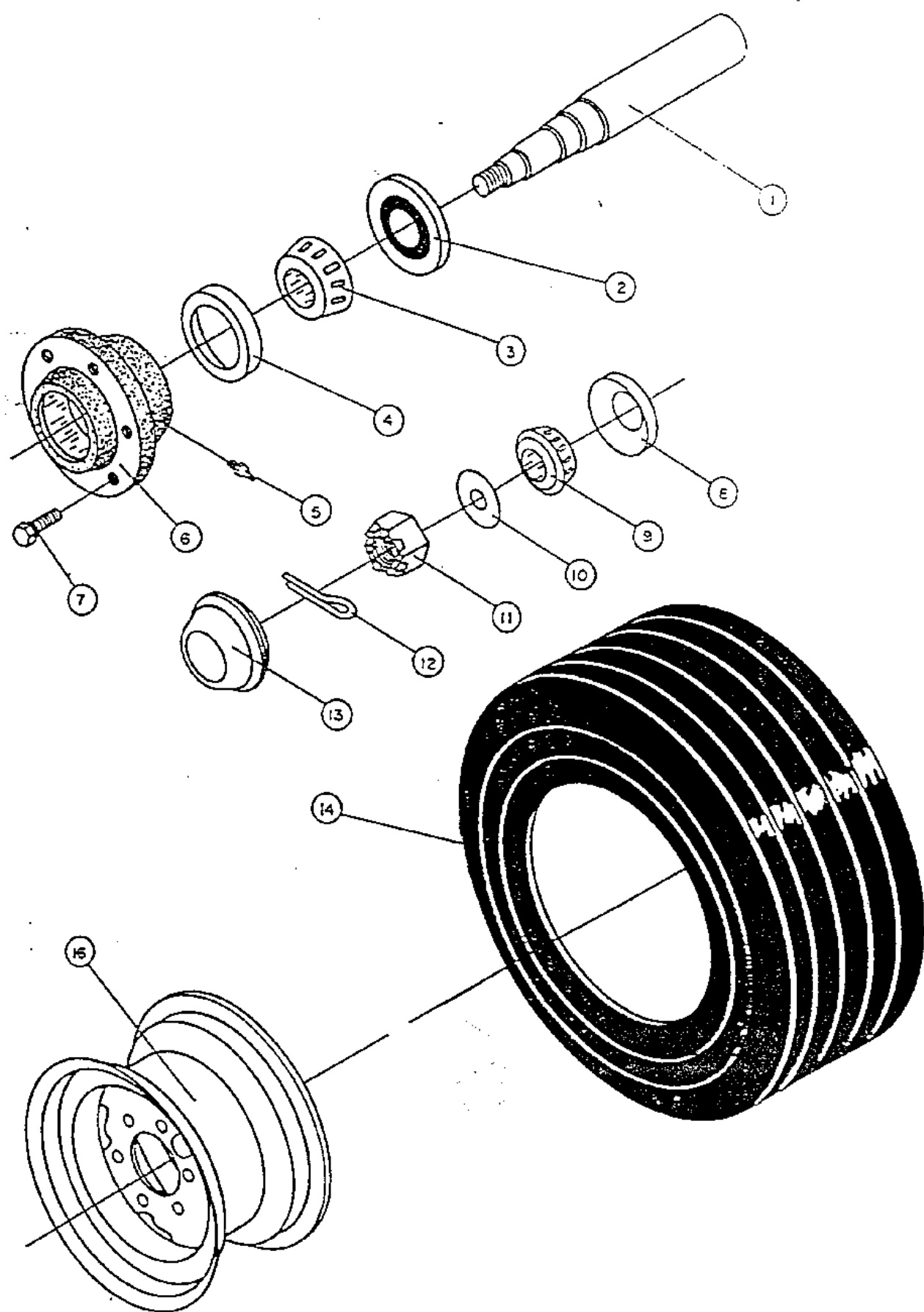
ITEM	PART NUMBER	DESCRIPTION	Nº
1	91250	611 Spindle 2" x 10"	1
2	91090	611 Seal	1
3	91170	611 Inner Cone LM29749	1
4	91150	611 Inner Race LM29710	1
5	91700	Grease Nipple 1/8" NPT Straight	1
6	91070	611 Hub	1
7	91060	Wheel Bolt 1/2"	6
8	91130	611 Outer Race LM67010	1
9	91110	611 Outer Cone LM67048	1
10	91190	Washer	1
11	91210	Castelated Nut	1
12	CPo324	Cotter Pin 3/16" x 1 1/2"	1
13	91230	611 Dust Cap	1
14	91008	11L-15LT 8PLY Farm Hiway Serv	1
16	91050	15" x 8" x 6" Wheel Rim	1

4-BOLT
HD211



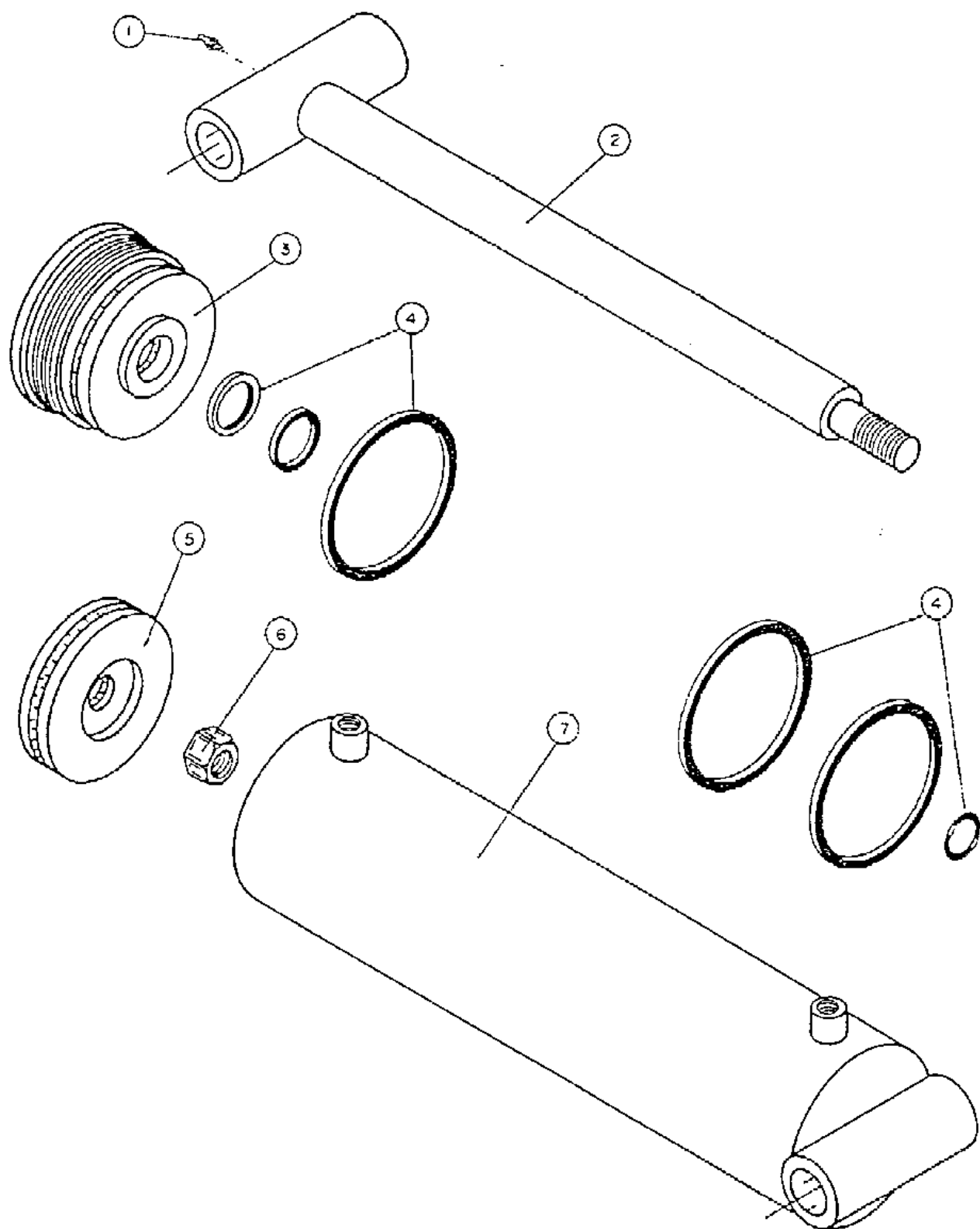
ITEM	PART NUMBER	DESCRIPTION	NO.
1	90301	3/8" HOSE x 120" 08 FJIC X 08 MNPT	2
2	849FS00808	08 MORB x 08 MJIC 90 DEG	3
3	849FS0808	08MNPT x 08 MJIC 90 DEG	4
4	90303	3/8 x 15 1/2" 04 MNPT X 06 MNPT	1
5	90302	3/8" x 15" 06 MNPT X 08 MNPT SWIVEL	1
6	45062	DOUBLE TEE BLOCK	1
7	90691	PILOT CKECK VALVE PC50	1
8	90272	3/8" HOSE x 24" 08 FJIC X 08 FJIC	1
9	90305	3/8" HOSE x 30 1/2" 06 MNPT X 08 FJIC	2
10	90117	3" X 8" - 1 1/4" SHAFT 3/8" TOP PORT	1
11	90308	3/8 " HOSE x 50" 08 FJIC X 06 MNPT	2
12	90120	3 1/2" x 13" - SHAFT 1/2" TOP PORT	2
13	844FS08	08 MJIC TEE	1
14	92089	FPS VALVE	1
15	90313	3/8" HOSE x 18" HOSE 08 FJIC x 08FJIC	1
16	90118	3" x 10" - 1 1/4" SHAFT 3/8" SIDE PORT	1
17	60UA0404	90 DEG SWIVEL ELBOW 1/4"	1
18	24SA0806	MALE NIPPLE	1
19	60UA0808	1/2 MNPT x 1/2 FNPT 90 deg. Swivel	1

611 Hub Sprindle



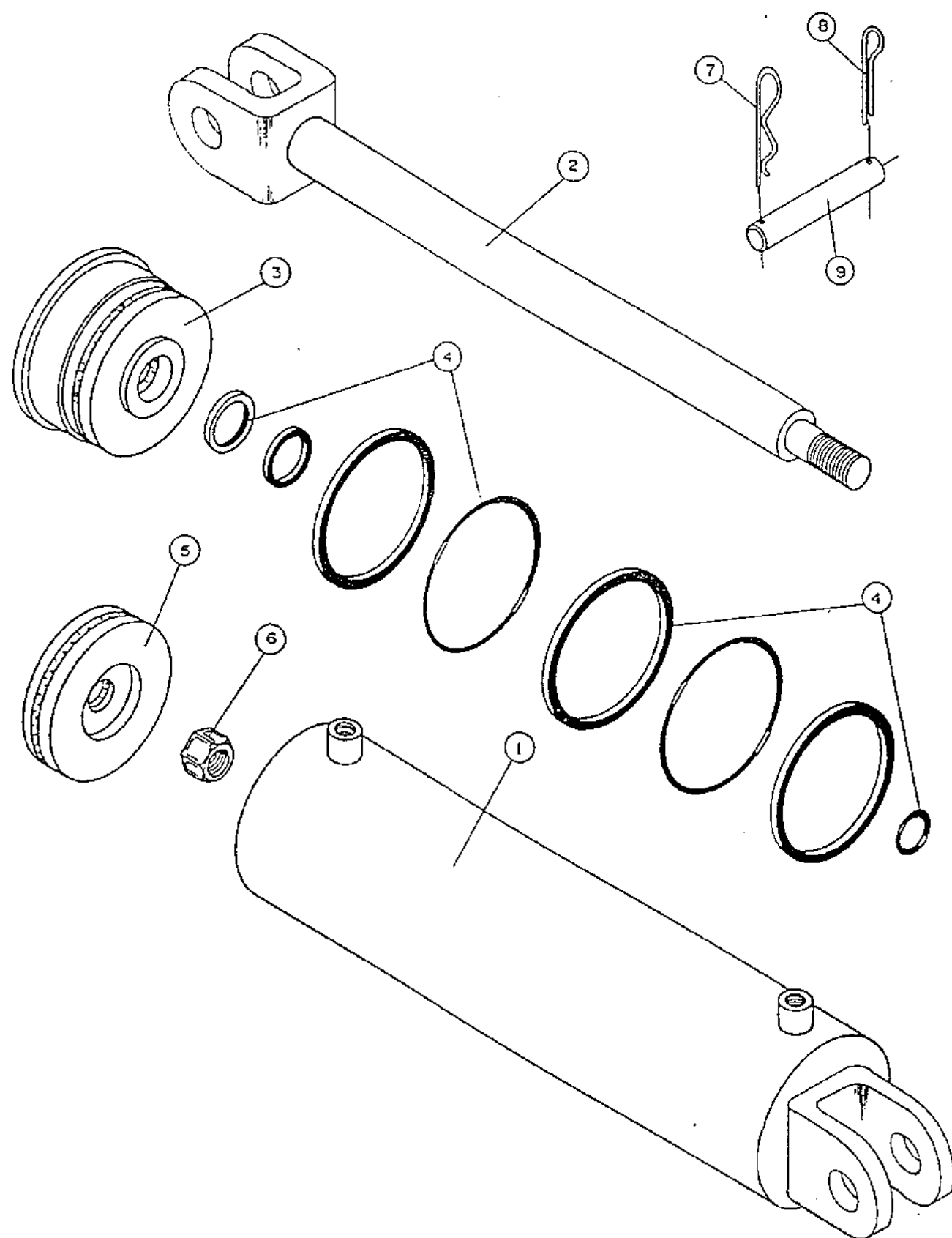
ITEM	PART NUMBER	DESCRIPTION	QTY
1	301204	1/2" WHEEL BOLT	1
2	301203	HD211 WHEEL HUB	1
3	301205	L44610 RACE	1
4	301206	L44643 BEARING	1
5	301207	SE10 SEAL	1
6	B5C16144P	1 X 9 UNC GR5 PLTD	1
7	LNC16	1" UNC LOCK NUT	1
8	301208	1" I.D. X 2" L SPACER	1
	301209	1" I.D. X 1 1/2" SPACER	1
			4
			1
			1
			1

3 1/2" X 13" Cylinder



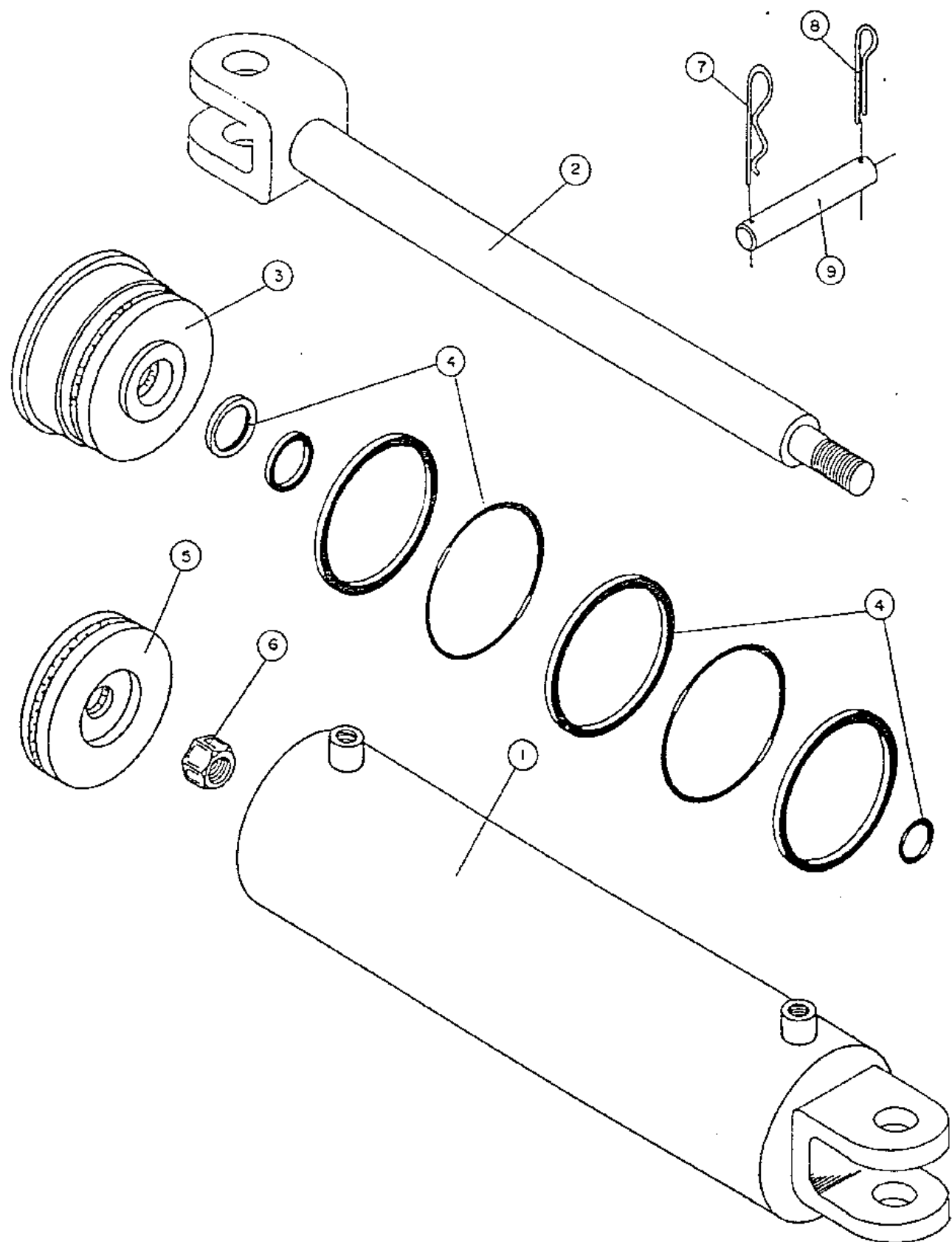
ITEM	PART NUMBER	DESCRIPTION	Nº
1	91700	Grease Nipple 1/8" NPT Straight	1
2	90645	Cylinder Shaft c/w Tube End	1
3	90662	3 1/2" Cylinder Screw on End Cap	1
4	90680	Seal Kit 3 1/2"	1
5	90700	Piston 3 1/2" Cylinder	1
6	90720	Piston Nut	1
7	90746	3 1/2" x 13 Cylinder Screw on Tube	1
	90108	3 1/2" x 13 Cylinder Complete (Tube Ends)	*
*As Required			

3" x 8" Cylinder

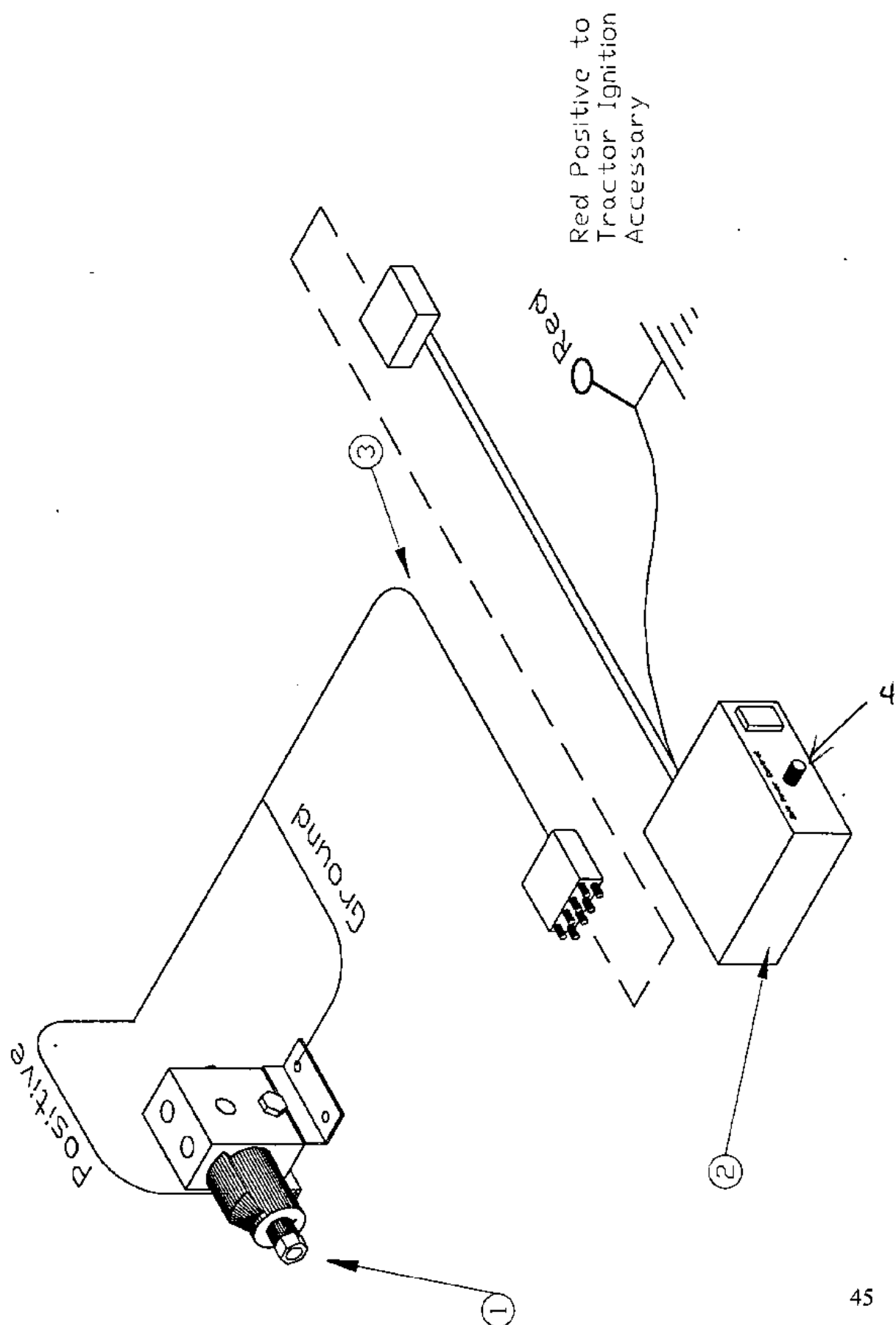


ITEM	PART NUMBER	DESCRIPTION	No
1	90748	3" x 8" Cylinder Complete (Tube End)	1
2	90647	3" x 8" Cylinder Shaft c/w end	1
3	90666	3" Cylinder Screw on End Cap	1
4	90684	Seal Kit 3"	1
5	90705	Piston 3" Cylinder	1
6	90720	Piston Nut	1
7	HP52	Hair Pin Clip 3 1/4"	2
8	CPO324	Cotter Pin 3/16" x 1 1/2"	2
9	91605	Pin Cylinder 1" x 3 1/4"	2
	90710	3" x 8" Cylinder Complete (Tube End)	*
		*As Required	

3" x 10" Cylinder



ITEM	PART NUMBER	DESCRIPTION	No
1	90749	3" x 10" Cylinder Screw Tube	1
2	90648	3" x 10" Cylinder Shaft c/w Tube End	1
3	90666	3" Cylinder Screw on end Cap	1
4	90684	Seal Kit 3"	1
5	90705	Piston 3" Cylinder	1
6	90720	Piston Nut	1
7	HP52	Hair Pin clip 3 1/4"	2
8	CPO324	Cotter Pin 3/16" x 1 1/2"	2
9	91605	Pin Cylinder 1" x 3 1/4"	2
	90711	3" x 10" Cylinder Complete (Tube End)	*



ITEM	PART NUMBER	DESCRIPTION	NO.
1	92089	FPS Valve	1
2	92076	Model 700 Control Box	1
3	92078	Implement Harness	1
4	92136	Toggle Switch 2 way.	1