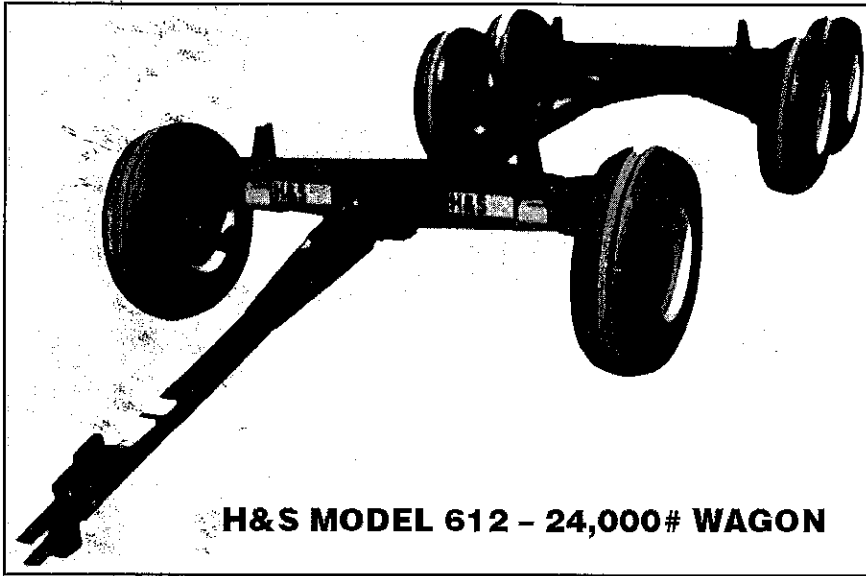


H&S

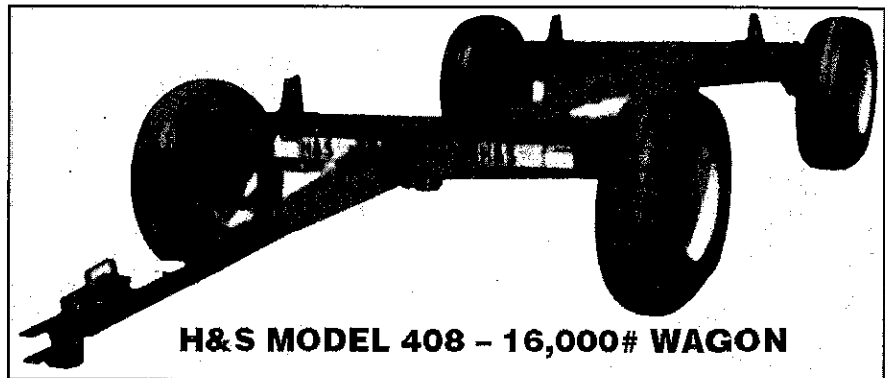
RUNNING GEAR

OPERATOR & PARTS MANUAL



H&S MODEL 612 - 24,000# WAGON

10 Models
7 Single Axle
3 Tandems
Rated
Capacities
from 12,000#
to 34,000#



H&S MODEL 408 - 16,000# WAGON



WARNING READ AND UNDERSTAND THIS MANUAL
BEFORE OPERATING THIS EQUIPMENT.

UNSAFE OPERATION OR MAINTENANCE OF THIS EQUIPMENT CAN RESULT IN
SERIOUS INJURY OR DEATH.

12-16-99

Manufactured By

H&S MANUFACTURING CO., INC.

P.O. BOX 768 • (715) 387-3414 FAX (715) 384-5463

MARSHFIELD, WISCONSIN 54449

H&S RUNNING GEAR OPERATOR & PARTS MANUAL

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INSTRUCTIONS FOR ORDERING PARTS

All service parts should be ordered through your authorized H&S dealer. He will be able to give you faster service if you will provide him with the following.

1. Model of Running Gear.
Serial Number - Serial number is located on the right, rear bolster brace.
2. All reference to left or right apply to the machine as viewed from the rear.
3. Parts should not be ordered from illustration only. Complete parts numbers and descriptions, as shown in the parts listing.
4. If dealer has to order parts - give shipping instructions
VIA truck - large pieces (please specify local truck lines)
VIA United Parcel Service (include full address)

H&S Mfg. Co.	
MARSHFIELD, WIS.	
MOD. NO.	<input type="text"/>
SER. NO.	<input type="text"/>
CAP. LBS.	<input type="text"/>

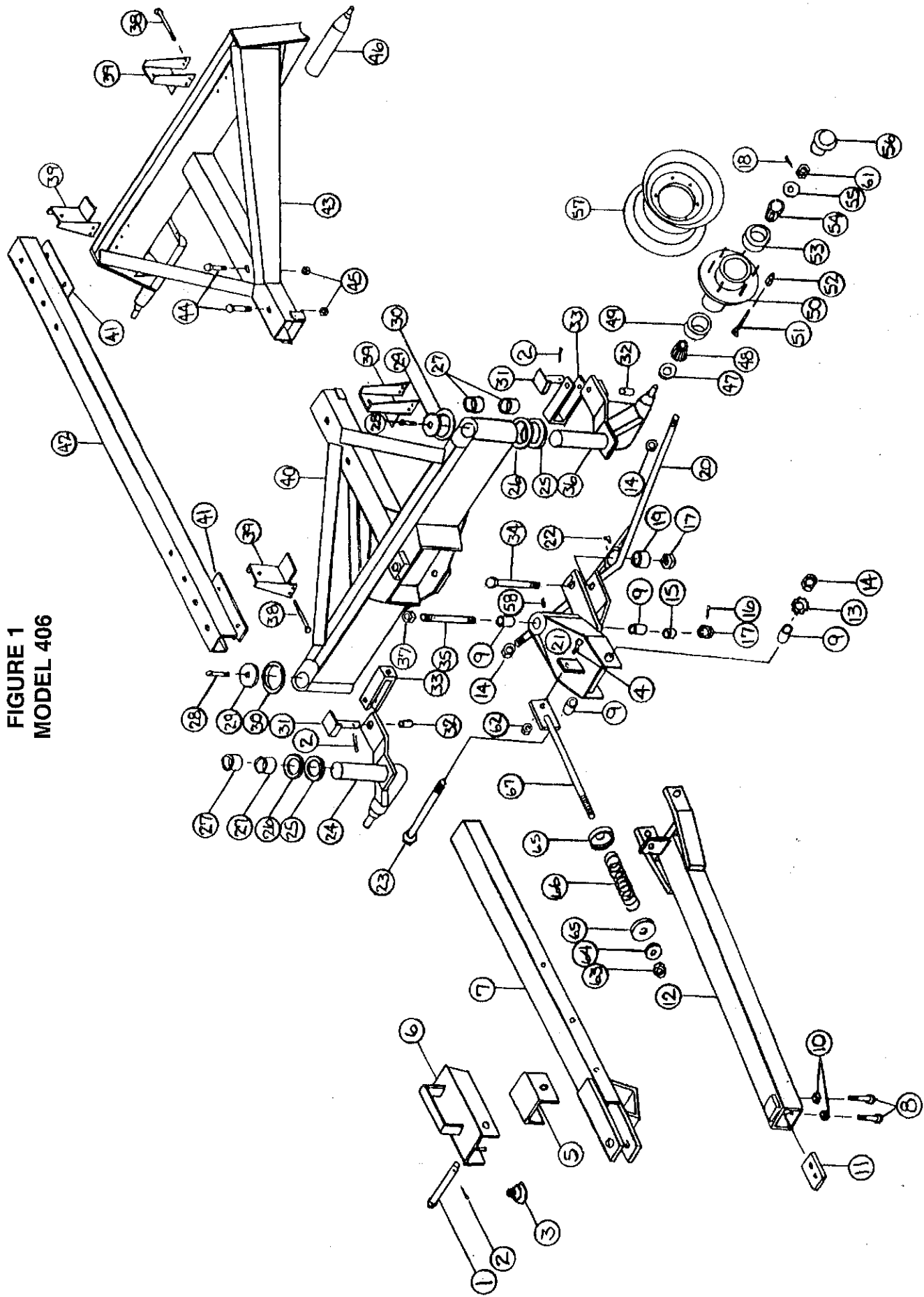
PLEASE RECORD NUMBERS FOR YOUR UNIT FOR QUICK REFERENCE

ABOUT IMPROVEMENTS

H&S is continually striving to improve its products.

We must therefore, reserve the right to make improvements or changes when it becomes practical to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

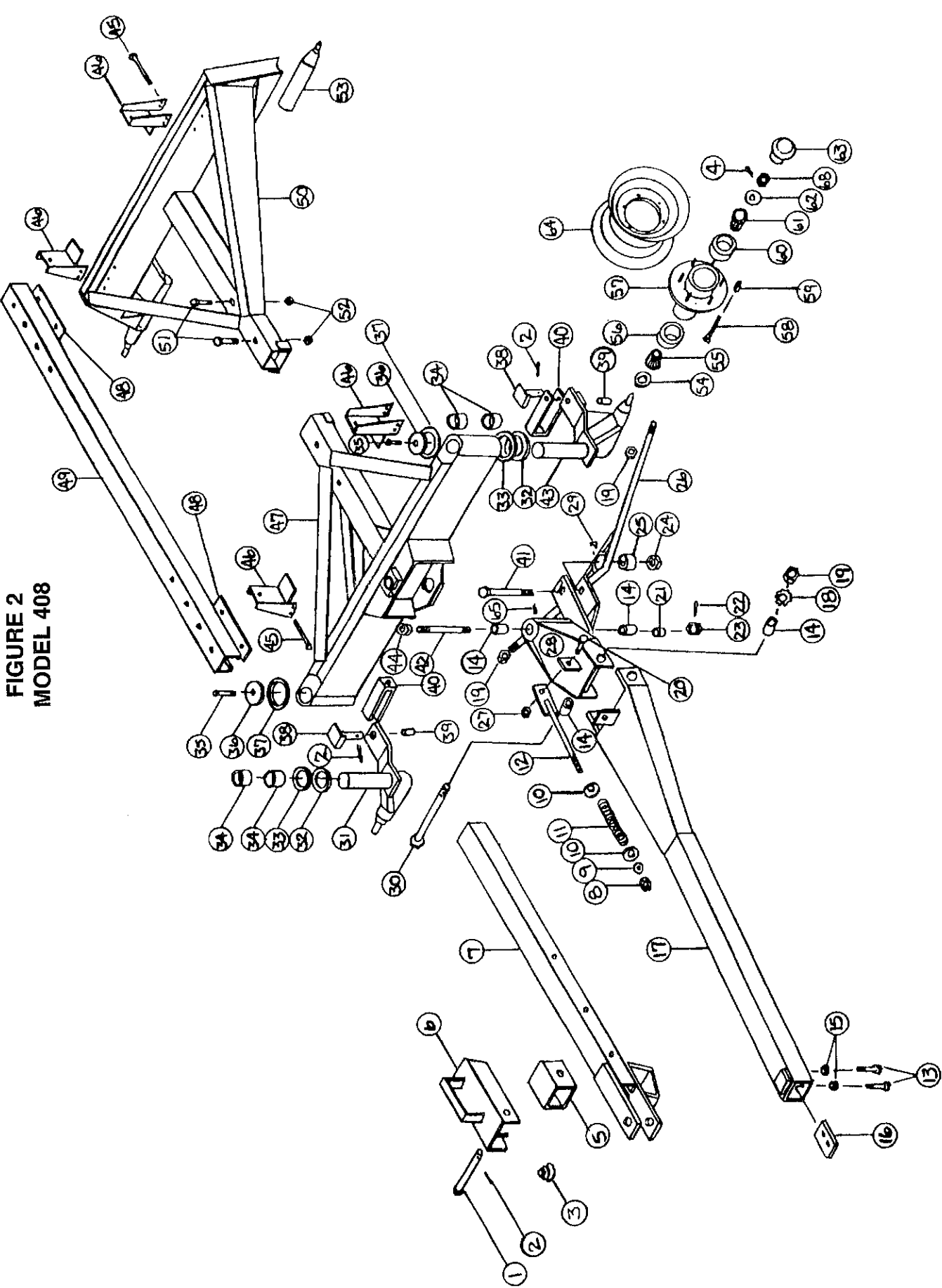
FIGURE 1
MODEL 406



**FIGURE 1 – MODEL 406
6 TON RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG106	Clevis Pin 4"	34.	RG181	Tie Rod Center Bolt
2.	T37	Cotter Pin	35.	RG286	Steering Pin
3.	RG228	Latch Spring	36.	RG93	LH Front Spindle
4.	RG15	Bolt 5/8" x 1-3/4"	37.	RG114	Jam Nut 3/4"
5.	RG229	Telepole Stop	38.	RG36	Bolt 3/8" x 4"
6.	RG231	Latch	39.	RG122	Stake Pocket
7.	RG110	Telepole	40.	RG123	Front Frame
8.	T62	Bolt 5/8" x 1-1/2" GR.5	41.	RG124	Reinforcement Plate
9.	RG111	Bushing 3/4"ID x 1"OD x 2"	42.	RG125	Reach
10.	T69	5/8" Lock Washer	43.	RG126	Back Frame
11.	RG291	Telepole Stop	44.	12V45	Bolt 1/2" x 1-1/2" GR.5
12.	RG235	Pole	45.	9S17	1/2" Lock Nut
13.	RG113	3/4" Star Washer	46.	RG42	Back Spindle
14.	RG114	3/4" Jam Nut	47.	RG98	Seal
15.	RG115	Bushing 49/64"ID x 1"OD x 1/2"	48.	RG99	Inner Bearing
16.	T56	Cotter Pin 5/32" x 2"	49.	RG100	Inner Race
17.	T35	3/4" Slotted Nut	50.	RG101	Hub
18.	T56	Cotter Pin 5/32" x 2	51.	RG102	Stud Bolt
19.	RG18	Bushing 3/4"ID x 1"OD x 2"	52.	BFR144	Nut
20.	RG116	Tie Rod	53.	RG47	Outer Race
21.	RG117	Pole Pivot	54.	RG48	Outer Bearing
22.	RG21	45 Degree Grease Zerk	55.	RG182	Washer
23.	RG118	Pole Pin	56.	RG103	Hub Cap
24.	RG86	RH Front Spindle	57.	RG127	Wheel 15 x 6
25.	RG87	Bronze Thrust Washer 1/8"	58.	RG51	90 Degree Grease Zerk
26.	RG88	Thrust Washer 1/16"	61.	RG105	Nut
27.	RGT3	Bushing 1-49/64"ID x 2"OD x 2"	OPTIONS: Pole Assist		
28.	RG27	Spindle Bolt 3/8" x 1"	62.	T60	5/8" Top Lock Nut
29.	RG89	Front Spindle Cap	63.	RG7	5/8" Nylon Lock Nut
30.	RG90	Poly Washer	64.	RG8	5/8" Flat Washer
31.	RG119	Clevis Pin	65.	RG9	Spring Retainer
32.	RG31	Bushing 5/8"ID x 7/8"OD x 1"	66.	T148	Spring
33.	RG120	Clevis	67.	RG10	Adjustment Rod

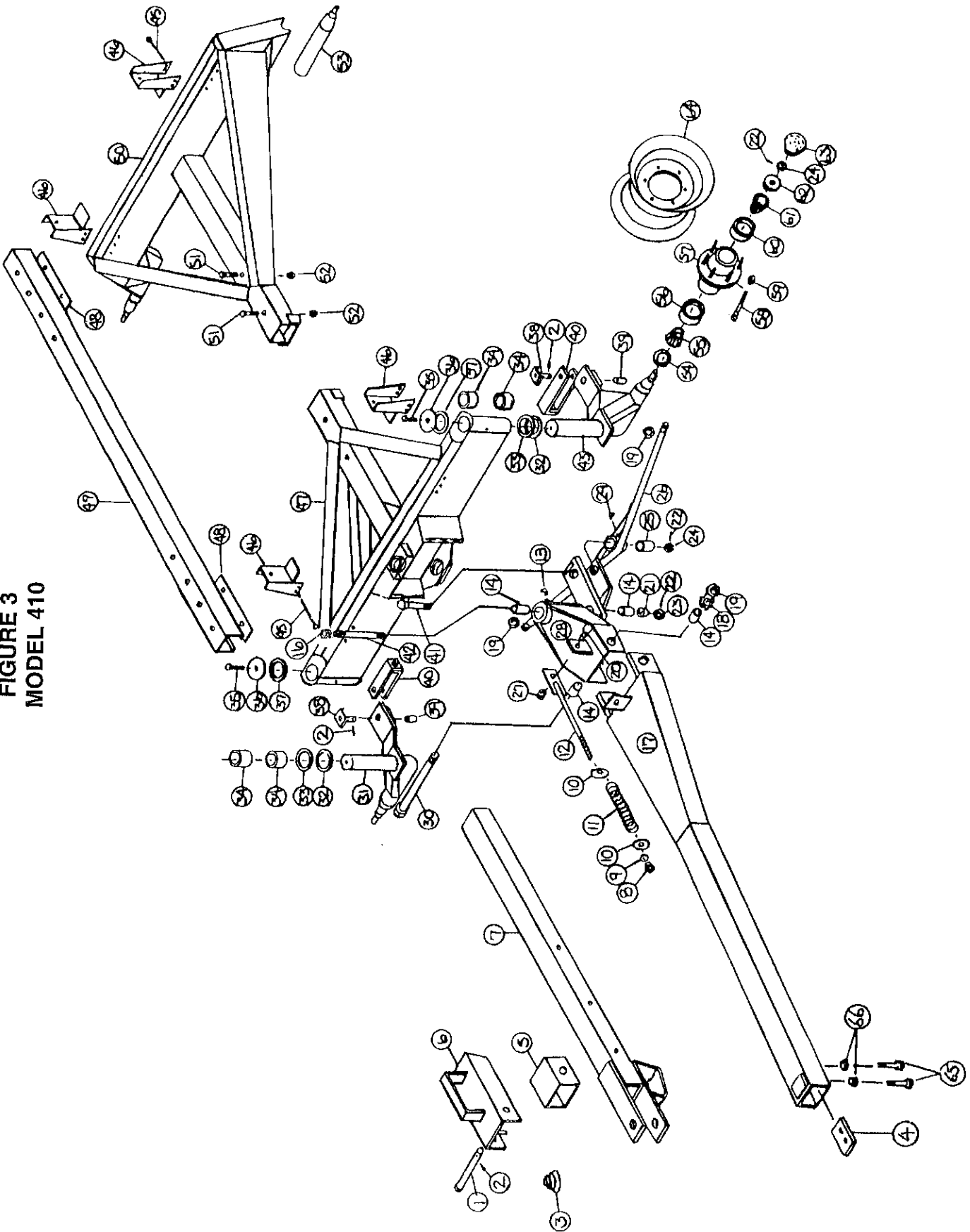
FIGURE 2
MODEL 408



**FIGURE 2 – MODEL 408
8 TON RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG1	Clevis Pin 5"	34.	RGT3	Bushing 1-49/64"ID x 2"OD x 2"
2.	T37	Cotter Pin	35.	RG27	3/8" x 1" Spindle Bolt GR.5
3.	RG228	Latch Spring	36.	RG89	Front Spindle Cap
4.	T56	Cotter Pin 5/32" x 2"	37.	RG90	Poly Washer
5.	RG230	Telepole Stop	38.	RG30	Clevis Pin
6.	RG232	Latch	39.	RG31	Bushing 5/8"ID x 7/8"OD x 1"
7.	RG76	Telepole	40.	RG91	Clevis
8.	RG7	5/8" Nylon Lock Nut	41.	RG33	Tie Rod Center Bolt
9.	RG8	5/8" Flat Washer	42.	RG287	Steering Pin
10.	RG9	Spring Retainer	43.	RG93	LH Front Spindle
11.	T148	Spring	44.	RG80	Jam Nut 7/8"
12.	RG10	Adjustment Rod	45.	RG36	Bolt 3/8" x 4"
13.	T62	Bolt 5/8" x 1-1/2" GR.5	46.	RG221	Stake Pocket
14.	RG77	Bushing 57/64"ID x 1-1/8"OD x 2"	47.	RG94	Front Frame
15.	T69	5/8" Lock Washer	48.	RG39	Reinforcement Plate
16.	RG291	Telepole Stop	49.	RG95	Reach
17.	RG236	Pole	50.	RG96	Back Frame
18.	RG79	7/8" Star Washer	51.	BFR49	Bolt 3/4" x 1-1/2" GR.5
19.	RG80	7/8" Jam Nut	52.	HE7	3/4" Top Lock Nut
20.	RG15	Bolt 5/8" x 1-3/4"	53.	RG42	Back Spindle
21.	RG81	Bushing 57/64"ID x 1-1/8"OD x 5/8"	54.	RG98	Seal
22.	T56	Cotter Pin 5/32" x 2"	55.	RG99	Inner Bearing
23.	RG82	7/8" Slotted Nut	56.	RG100	Inner Race
24.	T35	3/4" Slotted Nut	57.	RG101	Hub
25.	RG18	Bushing 3/4"ID x 1"OD x 2"	58.	RG102	Stud Bolt
26.	RG83	Tie Rod	59.	BFR144	Nut
27.	T60	5/8" Top Lock Nut	60.	RG47	Outer Race
28.	RG84	Pole Pivot	61.	RG48	Outer Bearing
29.	RG21	45 Degree Grease Zerk	62.	RG182	Washer
30.	RG85	Pole Pin	63.	RG103	Hub Cap
31.	RG86	RH Front Spindle	64.	12N24	Wheel 15 x 8
32.	RG87	Bronze Thrust Washer 1/8"	65.	RG51	90 Degree Grease Zerk
33.	RG88	Thrust Washer 1/16"	68.	RG105	Nut

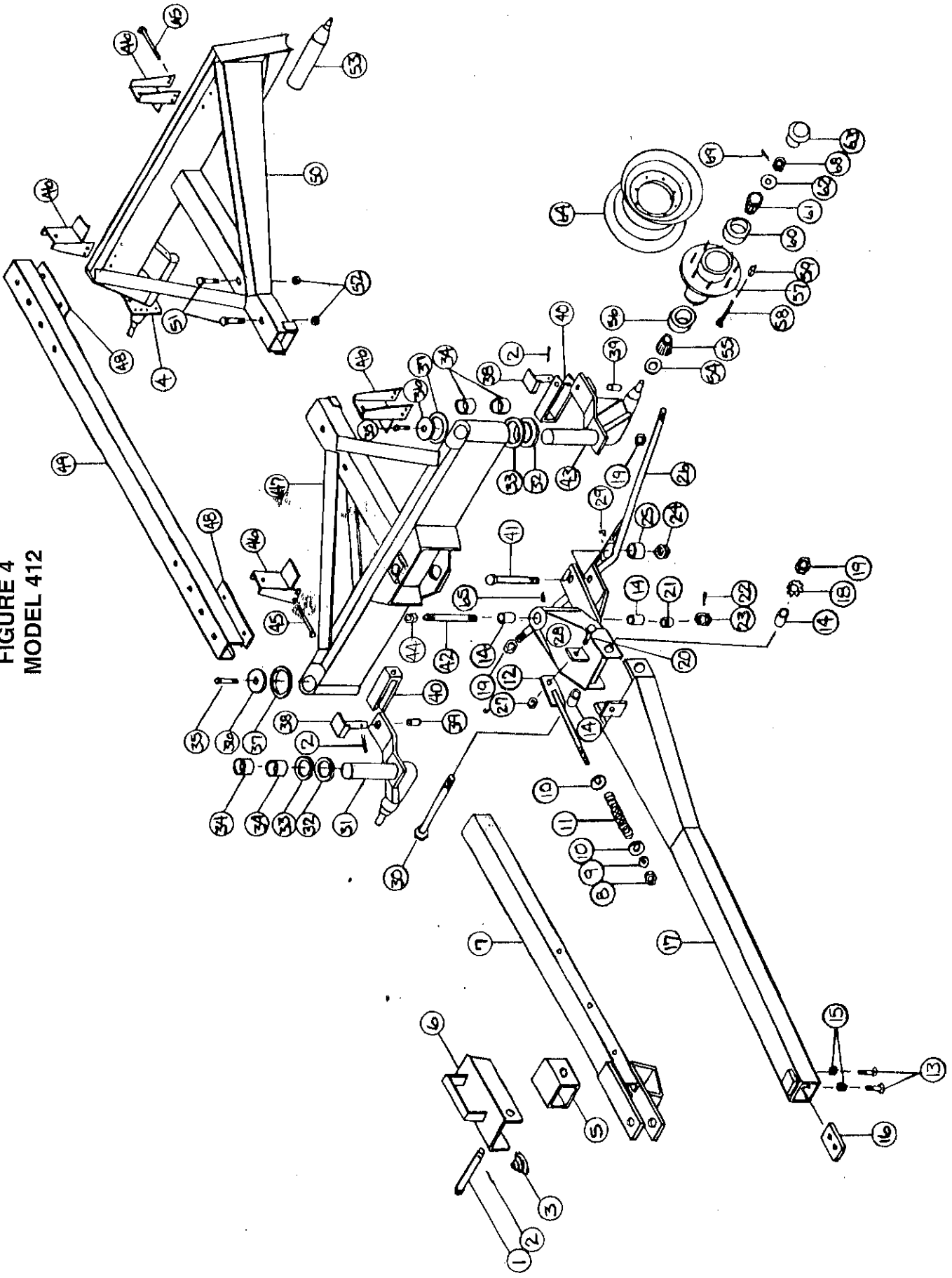
FIGURE 3
MODEL 410



**FIGURE 3 – MODEL 410
10 TON RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG1	Clevis Pin 5"	34.	RG26	Bushing
2.	T37	Cotter Pin	35.	RG27	3/8" x 1" - Spindle Bolt GR.5
3.	RG228	Latch Spring	36.	RG28	Front Spindle Cap
4.	RG291	Telepole Stop	37.	RG29	Poly Washer
5.	RG230	Telepole Stop Block	38.	RG30	Clevis Pin
6.	RG232	Latch	39.	RG31	Bushing
7.	RG6	Telepole	40.	RG32	Clevis
8.	RG7	5/8" Nylon Lock Nut	41.	RG33	Tie Rod Center Bolt
9.	RG8	5/8" Flat Washer	42.	RG288	Queen Pin
10.	RG9	Spring Retainer	43.	RG35	LH Front Spindle
11.	T148	Spring	45.	RG36	3/8" x 4" Bolt
12.	RG10	Adjustment Rod	46.	RG221	Stake Pockets
13.	RG51	90 Degree Grease Zerk	47.	RG38	Front Frame
14.	RG11	Bushing	48.	RG39	Reinforcement Plate
16.	RG14	Jam Nut 1"	49.	RG40	Reach
17.	RG237	Pole	50.	RG41	Back Frame
18.	RG13	3/4" Star Washer	51.	BFR49	3/4"-10 x 1-1/2" Bolt GR.5
19.	RG14	1"-14 Jam Nut (F.T.)	52.	HE7	3/4"-10 Top Lock Nut
20.	RG15	5/8" x 1-3/4" Bolt	53.	RG97	Back Spindle
21.	RG16	Bushing	54.	RG43	Seal
22.	T72	Cotter Pin 5/32" x 1-1/2"	55.	RG44	Inner Bearing
23.	RG17	1"-14 Slotted Nut (F.T.)	56.	RG45	Inner Race
24.	T35	3/4"-16 Slotted Nut (F.T.)	57.	RG46	Hub
25.	RG18	Bushing	58.	26G5	Stud Bolt
26.	RG19	Tie Rod	59.	26G6	Nut
27.	T60	5/8" Top Lock Nut	60.	RG47	Outer Race
28.	RG20	Pole Pivot	61.	RG48	Outer Bearing
29.	RG21	45 Degree Grease Zerk	62.	RG49	Washer
30.	RG22	Pole Pin	63.	12N23	Hub Cap
31.	RG23	RH Front Spindle	64.	RG50	Wheel
32.	RG24	Thrust Washer	65.	T62	Bolt 5/8" x 1-1/2" GR.5
33.	RG25	Thrust Washer	66.	T69	5/8" Lock Washer

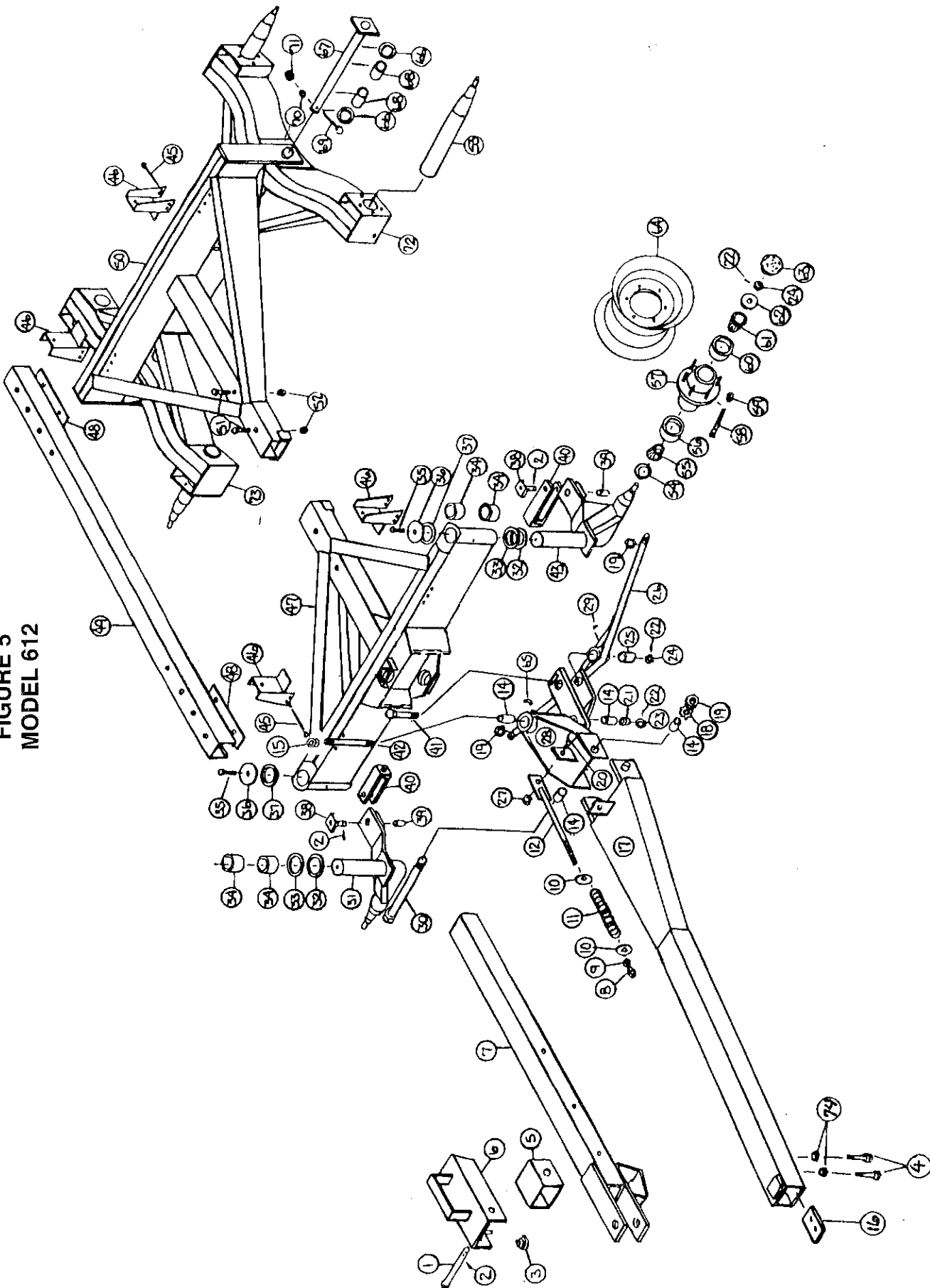
FIGURE 4
MODEL 412



**FIGURE 4 – MODEL 412
12 TON RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG1	Clevis Pin 5"	34.	RG60	Bushing
2.	T37	Cotter Pin	35.	RG27	3/8" x 1" Spindle Bolt GR.5
3.	RG228	Latch Spring	36.	RG61	Front Spindle Cap
4.	RG74	Brake Mount	37.	RG62	Poly Washer
5.	RG230	Telepole Stop	38.	RG30	Clevis Pin
6.	RG232	Latch	39.	RG31	Bushing
7.	RG53	Telepole	40.	RG32	Clevis
8.	RG7	5/8" Nylon Lock Nut	41.	RG33	Tie Rod Center Bolt
9.	RG8	5/8" Flat Washer	42.	RG288	Steering Pin
10.	RG9	Spring Retainer	43.	RG63	LH Front Spindle
11.	T148	Spring	44.	RG14	Jam Nut 1"
12.	RG10	Adjustment Rod	45.	RG36	Bolt 3/8" x 4"
13.	T62	Bolt 5/8" x 1-1/2" GR.5	46.	RG221	Stake Pocket
14.	RG11	Bushing 1"ID x 1-1/4"OD x 2"	47.	RG64	Front Frame
15.	T69	5/8" Lock Washer	48.	RG39	Reinforcement Plate
16.	RG291	Telepole Stop	49.	RG40	Reach
17.	RG238	Pole	50.	RG65	Back Frame
18.	RG13	1" Star Washer	51.	BFR49	Bolt 3/4" x 1-1/2" GR. 5
19.	RG14	1" Jam Nut	52.	HE7	3/4" Top Lock Nut
20.	RG15	Bolt 5/8" x 1-3/4"	53.	RG66	Back Spindle
21.	RG16	Bushing 1"ID x 1-1/4"OD x 5/8"	54.	RG67	Seal
22.	T72	Cotter Pin 5/32" x 1-1/2"	55.	RG68	Inner Bearing
23.	RG17	1" Slotted Nut	56.	RG69	Inner Race
24.	T35	3/4" Slotted Nut	57.	RG70	Hub
25.	RG18	Bushing 3/4"ID x 1"OD x 2"	58.	RG71	Stud Bolt
26.	RG56	Tie Rod	59.	RG72	Nut
27.	T60	5/8" Top Lock Nut	60.	RG47	Outer Race
28.	RG20	Pole Pivot	61.	RG48	Outer Bearing
29.	RG21	45 Degree Grease Zerk	62.	RG49	Washer
30.	RG22	Pole Pin	63.	12N23	Hub Cap
31.	RG57	RH Front Spindle	64.	RG73	Wheel 15 x 10
32.	RG58	Bronze Thrust Washer 1/8"	65.	RG51	90 Degree Grease Zerk
33.	RG59	Thrust Washer 1/16"	68.	T35	Nut
OPTIONS:			69.	T72	Cotter Pin 5/32" x 1-1/2"
	23N161	Wheel 16.1 X 11			

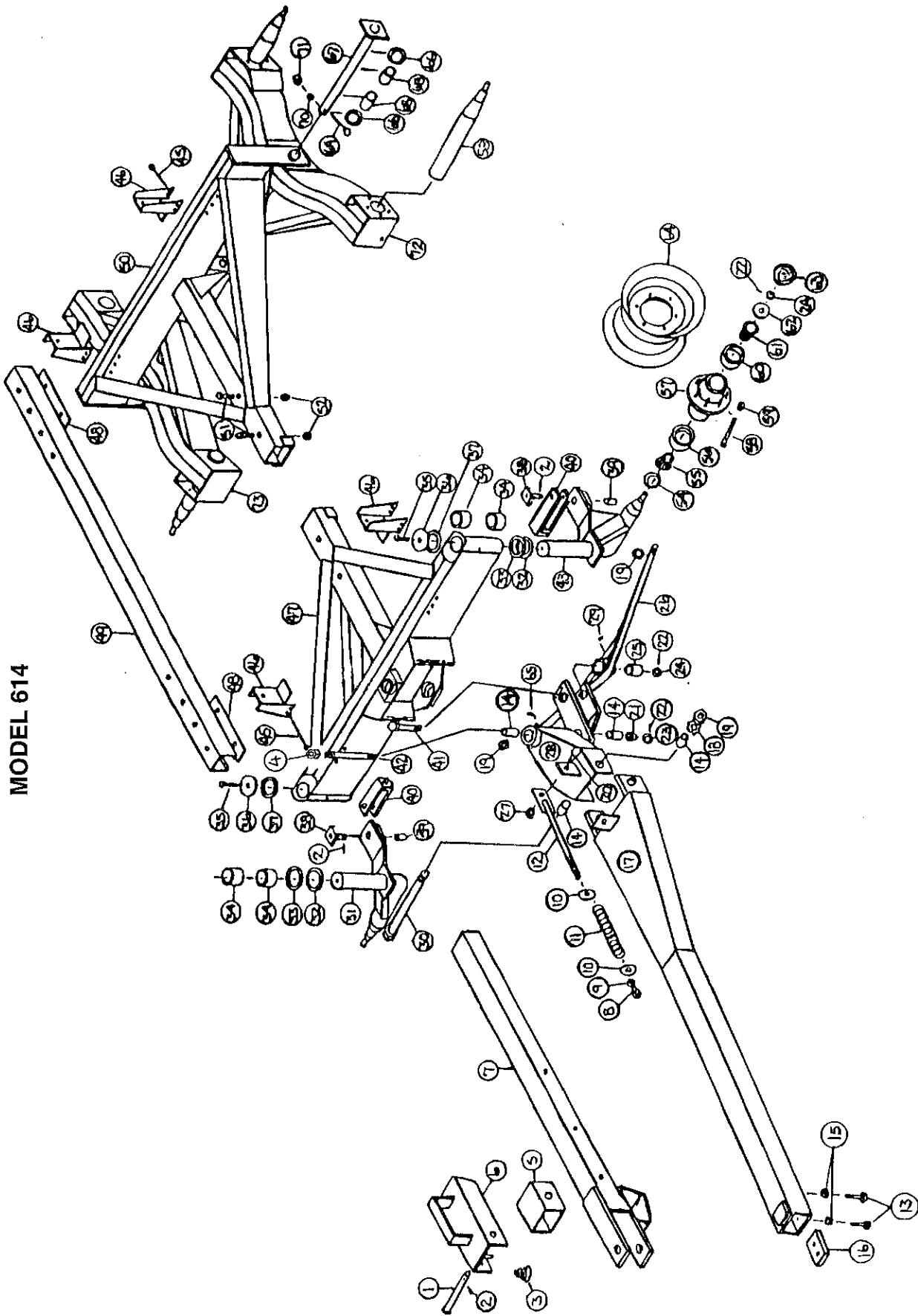
FIGURE 5
MODEL 612



**FIGURE 5 – MODEL 612
12 TON TANDEM RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG1	Clevis Pin 5"	38.	RG30	Clevis Pin
2.	T37	Cotter Pin	39.	RG31	Bushing
3.	RG228	Latch Spring	40.	RG32	Clevis
4.	T62	Bolt 5/8" x 1-1/2" GR.5	41.	RG33	Tie Rod Center Bolt
5.	RG230	Telepole Stop	42.	RG288	Queen Pin
6.	RG232	Latch	43.	RG35	LH Front Spindle
7.	RG6	Telepole	45.	RG36	3/8" x 4" Bolt
8.	RG7	5/8" Nylon Lock Nut	46.	RG221	Stake Pockets
9.	RG8	5/8" Flat Washer	47.	RG38	Front Frame
10.	RG9	Spring Retainer	48.	RG39	Reinforcement Plate
11.	T148	Spring	49.	RG40	Reach
12.	RG10	Adjustment Rod	50.	RGT6	Back Frame
14.	RG11	Bushing	51.	BFR49	3/4"-10 x 1-1/2" Bolt GR.5
15.	RG14	Jam Nut 1"	52.	HE7	3/4" -10 Top Lock Nut
16.	RG291	Telepole Stop	53.	RG97	Back Spindle
17.	RG237	Pole	54.	RG43	Seal
18.	RG13	3/4" Star Washer	55.	RG44	Inner Bearing
19.	RG14	1"-14 Jam Nut (F.T.)	56.	RG45	Inner Race
20.	RG15	5/8" x 1-3/4" Bolt	57.	RG46	Hub
21.	RG16	Bushing	58.	26G5	Stud Bolt
22.	T72	Cotter Pin 5/32" x 1-1/2"	59.	26G6	Nut
23.	RG17	1"-14 Slotted Nut (F.T.)	60.	RG47	Outer Race
24.	T35	3/4"-16 Slotted Nut (F.T.)	61.	RG48	Outer Bearing
25.	RG18	Bushing	62.	RG49	Washer
26.	RG19	Tie Rod	63.	12N23	Hub Cap
27.	T60	5/8" Top Lock Nut	64.	RG50	Wheel
28.	RG20	Pole Pivot	65.	RG51	90 Degree Grease Zerk
29.	RG21	45 Degree Grease Zerk	66.	RGT1	Washer
30.	RG22	Pole Pin	67.	RGT2	Tandem Pin
31.	RG23	RH Front Spindle	68.	RGT3	Bushing
32.	RG24	Thrust Washer	69.	23N53	1/2"-13 x 4" Bolt GR.5
33.	RG25	Thrust Washer	70.	R35	1/2" Lock Washer
34.	RG26	Bushing	71.	R29	1/2" Nut
35.	RG27	3/8" x 1" Spindle Bolt GR.5	72.	RGT4	LH Tandem Axle Assembly
36.	RG28	Front Spindle Cap	73.	RGT5	RH Tandem Axle Assembly
37.	RG29	Poly Washer	74.	T69	5/8" Lock Washer

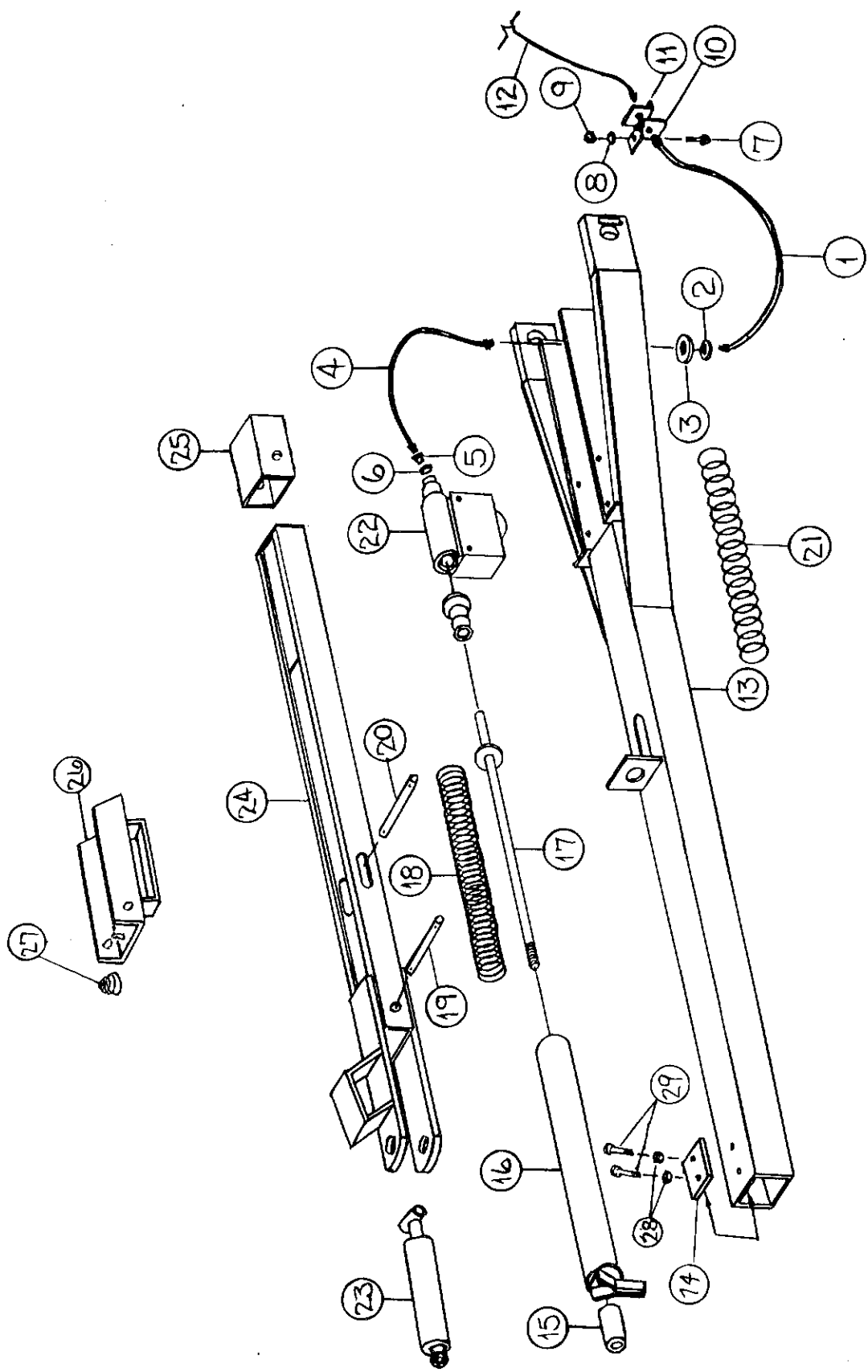
FIGURE 6
MODEL 614



**FIGURE 6 – MODEL 614
14 TON TANDEM RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG1	Clevis Pin 5"	36.	RG61	Front Spindle Cap
2.	T37	Cotter Pin	37.	RG62	Poly Washer
3.	RG228	Latch Spring	38.	RG30	Clevis Pin
4.	RG14	Jam Nut 1"	39.	RG31	Bushing 5/8"ID x 7/8"OD x 1"
5.	RG230	Telepole Stop	40.	RG32	Clevis
6.	RG232	Latch	41.	RG33	Tie Rod Center Bolt
7.	RG53	Telepole	42.	RG288	Queen Pin
8.	RG7	5/8" Nylon Lock Nut	43.	RG63	LH Front Spindle
9.	RG8	5/8" Flat Washer	45.	RG36	3/8" x 4" Bolt
10.	RG9	Spring Retainer	46.	RG221	Stake Pockets
11.	T148	Spring	47.	RG64	Front Frame
12.	RG10	Adjustment Rod	48.	RG39	Reinforcement Plate
13.	T62	5/8" x 1-1/2" Bolt GR.5	49.	RG40	Reach
14.	RG11	Bushing 1"ID x 1-1/4"OD x 2"	50.	RGT7	Back Frame
15.	T69	5/8" Lock Washer	51.	BFR49	3/4"-10 x 1-1/2" Bolt GR.5
16.	RG291	Telepole Stop	52.	HE7	3/4"-10 Top Lock Nut
17.	RG238	Pole	53.	RG66	Back Spindle
18.	RG13	1" Star Washer	54.	RG67	Seal
19.	RG14	1"-14 Jam Nut	55.	RG68	Inner Bearing
20.	RG15	5/8" x 1-3/4" Bolt	56.	RG69	Inner Race
21.	RG16	Bushing 1"ID x 1-1/4"OD x 5/8"	57.	RG70	Hub
22.	T72	Cotter Pin 5/32" x 1-1/2"	58.	RG71	Stud Bolt
23.	RG17	1"-14 Slotted Nut	59.	RG72	Nut
24.	T35	3/4"-16 Slotted Nut	60.	RG47	Outer Race
25.	RG18	Bushing 3/4"ID x 1"OD x 2"	61.	RG48	Outer Bearing
26.	RG56	Tie Rod	62.	RG49	Washer
27.	T60	5/8" Top Lock Nut	63.	12N23	Hub Cap
28.	RG20	Pole Pivot	64.	RG73	Wheel 15 x 10
29.	RG21	45 Degree Grease Zerk	65.	RG51	90 Degree Grease Zerk
30.	RG22	Pole Pin	66.	RGT12	Washer
31.	RG57	RH Front Spindle	67.	RGT8	Tandem Pin
32.	RG58	Thrust Washer Bronze 1/8"	68.	RG26	Bushing
33.	RG59	Thrust Washer 1/16"	69.	23N53	1/2"-13 x 4" Bolt GR.5
34.	RG60	Bushing 2-1/4"ID x 2-1/2"OD x 2"	70.	R35	1/2" Lock Washer
35.	RG27	3/8" x 1" Spindle Bolt GR.5	71.	R29	1/2" Nut
OPTIONS:			72.	RGT9	LH Tandem Axle Assembly
	RGT11	Wheel 16.1 x 11	73.	RGT10	RH Tandem Axle Assembly

FIGURE 7
MODELS 412, 612 & 614

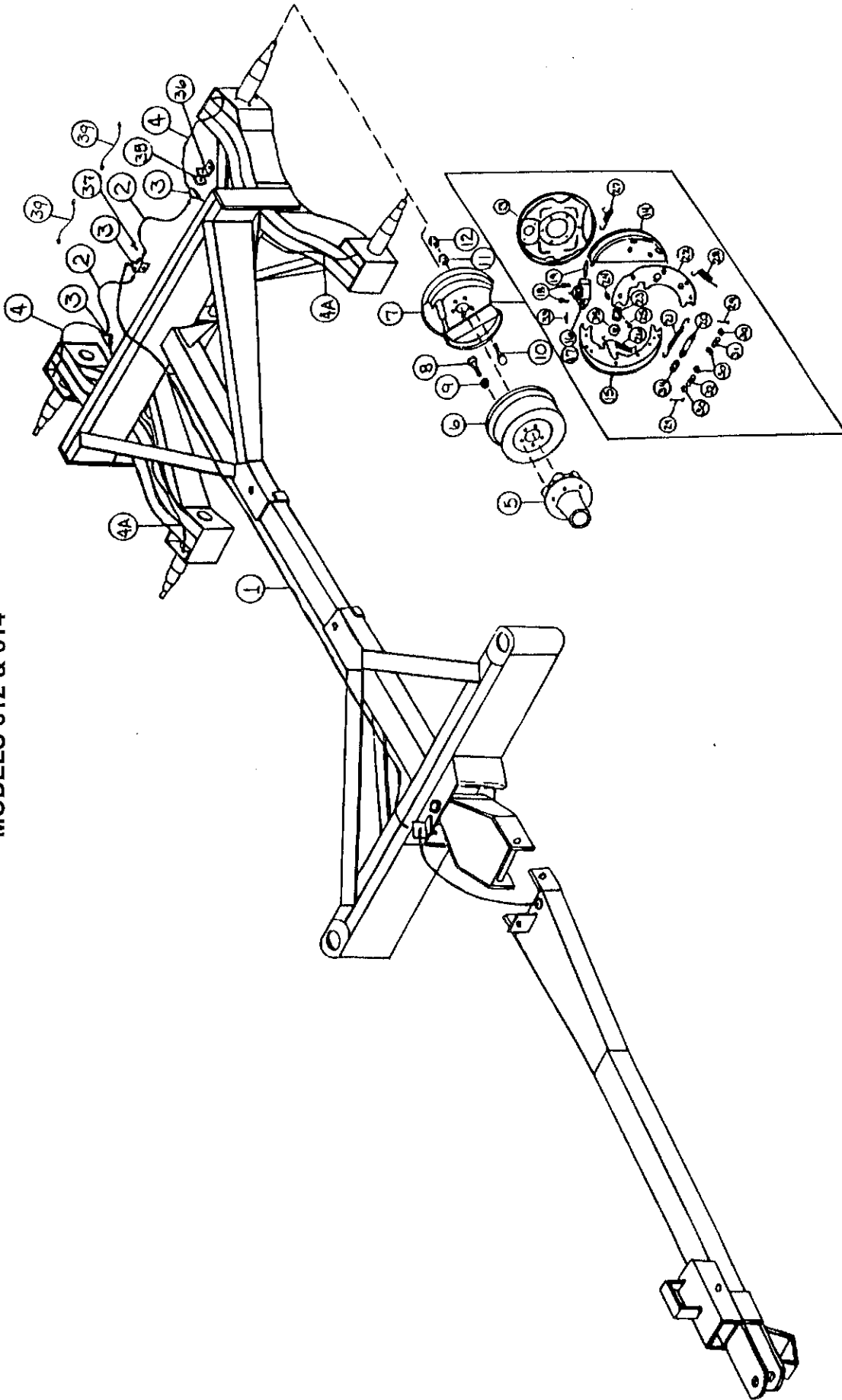


**FIGURE 7 – MODELS 412, 612 & 614
POLE ASSEMBLY
RUNNING GEAR BRAKE KITS**

ITEM	412	612	614	DESCRIPTION
1.	RGB24	"	"	Brake Hose 18-7/8"
2.	RG8	"	"	Flat Washer 5/8"
3.	12V96	"	"	Poly Washer
4.	RGB25	"	"	Brake Hose
5.	RGB20	"	"	Brass Connector
6.	RGB21	"	"	Brass Gasket
7.	RGB38	"	"	5/16" x 1" Hex Bolt
8.	RGB39	"	"	5/16" Lock Washer
9.	T116	"	"	5/16" Nut
10.	RGB122	"	"	Hose Bracket
11.	RGB28	"	"	Hose Clip
12.	RGB22	"	"	Brake Line 1010865-180"
13.	RGB118	"	"	Pole Assembly
14.	RG54	"	"	Stop Block
15.	RGB3	"	"	Push Rod End
16.	RGB4	"	"	Spring Shield
17.	RGB5	"	"	Push Rod
18.	RGB29	"	"	Spring Push Rod
19.	RGB2	"	"	Damper Pin
20.	RGB10	"	"	Damper Pin
21.	T148	"	"	Pole Lift Spring
22.	RGB19	"	"	Master Cylinder
23.	RGB18	"	"	Damper
24.	RGB8	"	"	Telepole Assembly
25.	RGB112	"	"	Telepole Stop
26.	RGB113	"	"	Latch
27.	RG228	"	"	Latch Spring
28.	T69	"	"	5/8" Lock Washer
29.	T62	"	"	Bolt 5/8" x 1-1/2" GR.5

NOTE: " (MEANS SAME AS PRECEDING NUMBER)

FIGURE 8
MODELS 612 & 614

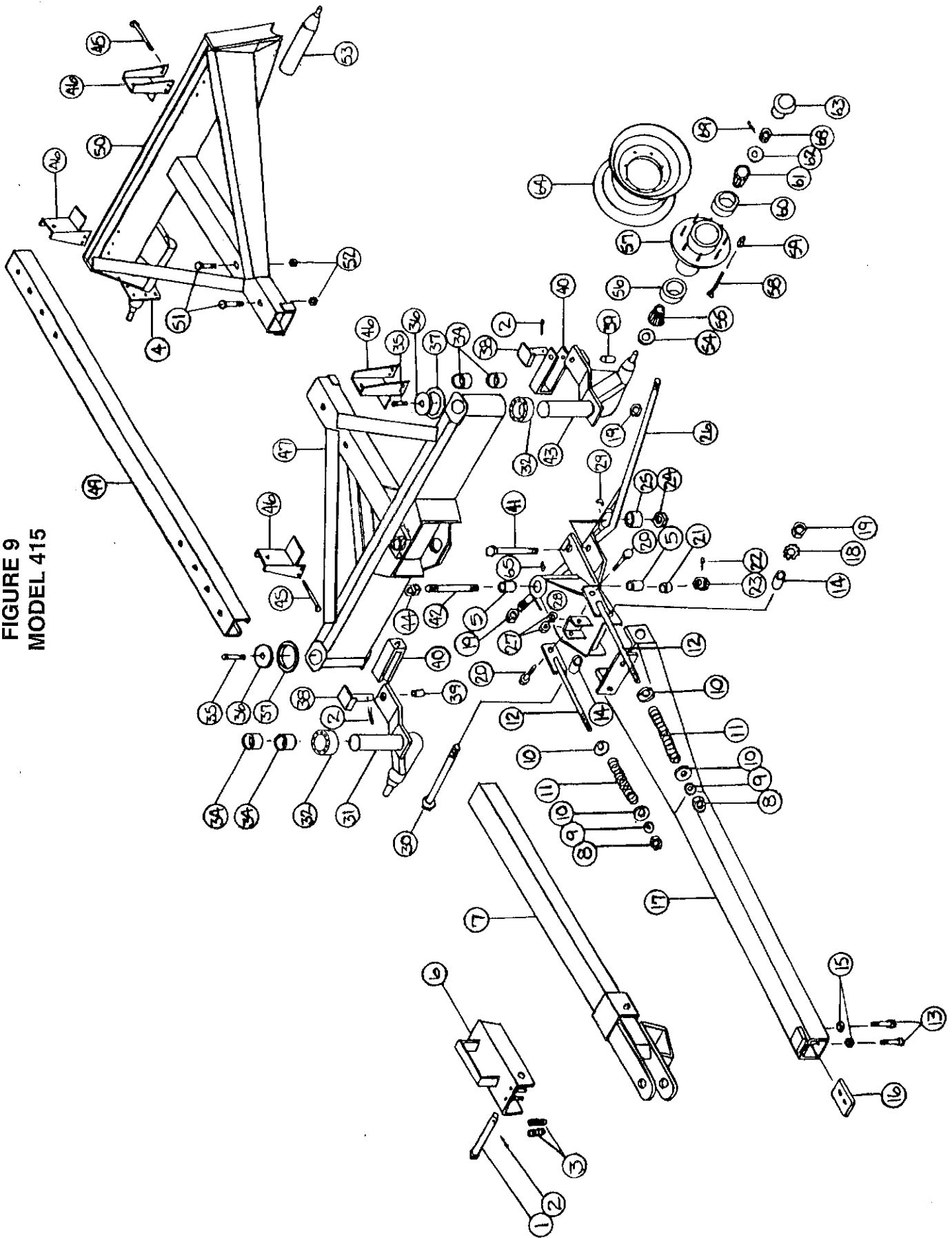


**FIGURE 8 – MODELS 612 & 614
612 & 614 TANDEM 2 AND 4 WHEEL BRAKE KITS
BRAKE ASSEMBLY**

ITEM	(2 WHEEL BRAKE KITS)		(4 WHEEL BRAKE KITS)		DESCRIPTION
	612	614	612	614	
1.	RGB22	"	"	"	180" Brake Line
2.	RGB24	"	"	"	Brake Hose
3.	RGB26	"	"	"	Tee
4.	RGB23	–	"	–	30" Brake Line
4.	–	RGB36	–	RGB36	36" Brake Line
4A.	–	–	RGB36	"	36" Brake Line
5.	RGB17	RGB33	RGB17	RGB33	Hub (Complete Brake Hub Assembly)
6.	RGB79	RGB32	RGB16	RGB32	Brake Drum
7.	RGB78	RGB31	RGB15	RGB31	Brake Cluster LH
*	RGB77	RGB30	RGB14	RGB30	Brake Cluster RH
8.	RGB64	"	"	"	Cap Screw
9.	RGB65	"	"	"	Lock Washer
10.	RGB66	"	"	"	Cap Screw
11.	RGB67	"	"	"	Lock Washer
12.	RGB68	"	"	"	Nut
13.	RGB42	"	"	"	Back Plate Assembly
14.	RGB80	RGB43	RGB80	RGB43	Front Shoe Assembly
15.	RGB81	RGB44	RGB81	RGB44	Rear Shoe Assembly
16.	RGB45	"	"	"	Wheel Cylinder Assembly RH
17.	RGB46	"	"	"	Wheel Cylinder Assembly LH
18.	RGB47	"	"	"	Screw and Lock Washer
19.	RGB48	"	"	"	Push Rod
20.	RGB82	RGB49	RGB82	RGB49	Adjusting Screw Assembly
21.	RGB50	"	"	"	Spring Adjusting Screw
22.	RGB83	RGB51	RGB83	RGB51	Shoe Lever
23.	RGB84	RGB52	RGB84	RGB52	Travel Link
24.	RGB53	"	"	"	Lock Nut
25.	RGB54	"	"	"	Hex Cap - Screw
26.	RGB55	"	"	"	Spring - Shoe
27.	RGB75	"	"	"	Spring - Lever
28.	RGB76	"	"	"	Spring - Shoe
29.	RGB85	RGB56	RGB85	RGB56	Pin - Shoe Hold down
30.	RGB57	"	"	"	Cup - Shoe Hold down
31.	RGB58	"	"	"	Spring - Hold down (Yellow)
32.	RGB59	"	"	"	Spring - Hold down (Black)
33.	RGB60	"	"	"	Cover Plate
34.	RGB86	RGB61	RGB86	RGB61	Socket
35.	RGB62	"	"	"	Washer
36.	RGB27	"	"	"	Hose Bracket
37.	RGB63	"	"	"	5/16 x 1" Self Tapping Bolt
38.	RGB28	"	"	"	Clip
*	RGB71	–	RGB74	–	Complete Brake Kit for 612
*	–	RGB72	–	RGB73	Complete Brake Kit for 614
39.	–	–	RGB105	RGB105	Brake Line 4-1/2"

NOTE: * (MEANS NOT SHOWN)
 – (MEANS NOT USED ON THIS MODEL)
 " (MEANS SAME AS PRECEDING NUMBER)

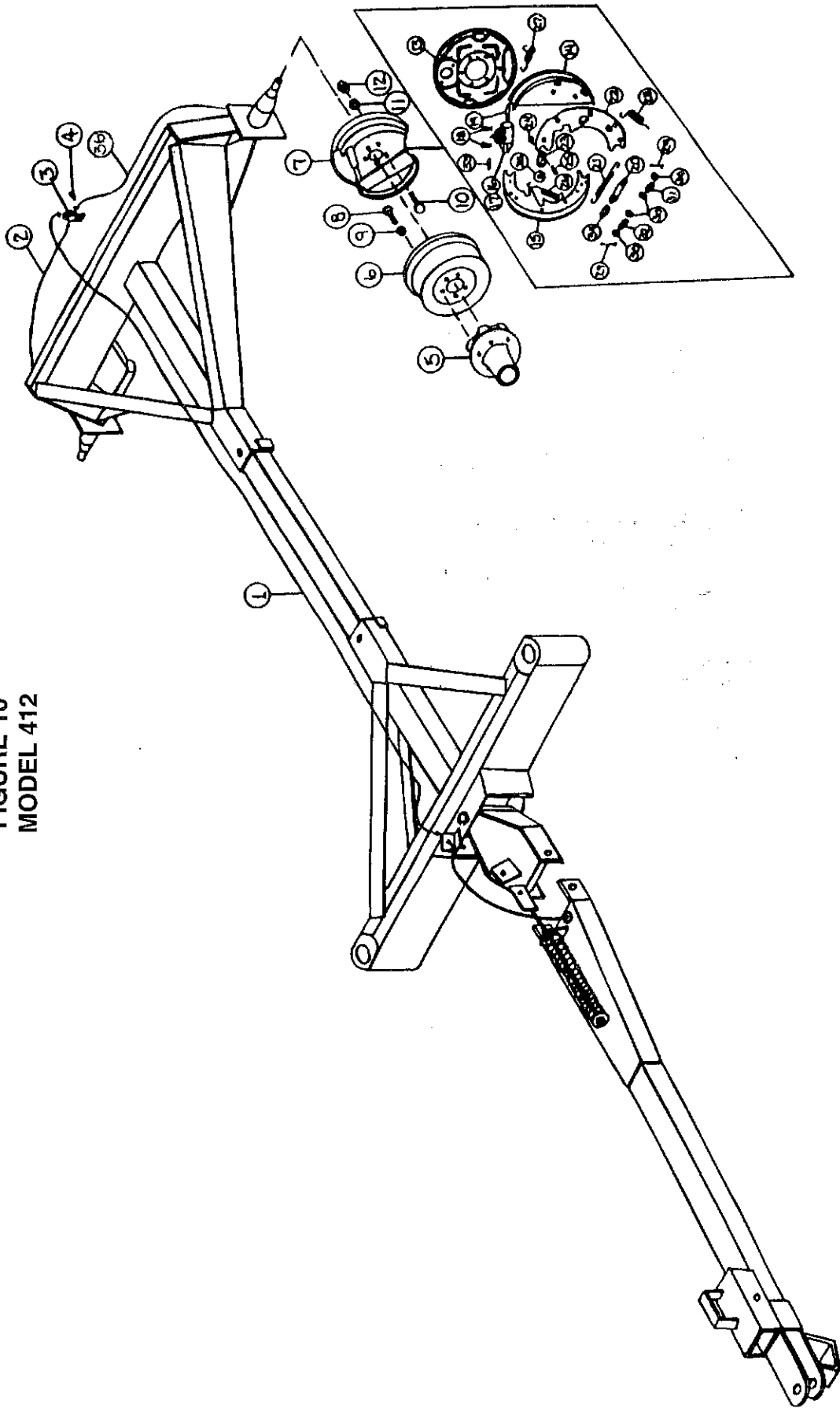
FIGURE 9
MODEL 415



**FIGURE 9 – MODEL 415
15 TON RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG130	Clevis Pin	34.	RG147	Bushing 2-3/4"ID x 3"OD x 3"
2.	T72	Cotter Pin	35.	RG27	3/8" x 1" Spindle Bolt GR.5
3.	RG228	Latch Spring	36.	RG148	Front Spindle Cap
4.	RG172	Brake Mount	37.	RG149	Poly Washer
5.	RG132	Bushing	38.	RG150	Clevis Pin
6.	RG233	Latch	39.	RG151	Bushing 1"ID x 1-1/4"OD x 1-1/4"
7.	RG241	Telepole	40.	RG152	Clevis
8.	RG7	5/8" Nylon Lock Nut	41.	RG153	Tie Rod Center Bolt
9.	RG8	5/8" Flat Washer	42.	RG289	Steering Pin
10.	RG9	Spring Retainer	43.	RG155	LH Front Spindle
11.	T148	Spring	44.	RG139	Jam Nut 1-1/4"
12.	RG10	Adjustment Rod	45.	RG156	Bolt 1/2" x 5-1/2" GR.5
13.	T62	Bolt 5/8" x 1-1/2" GR.5	46.	RG227	Stake Pocket
14.	RG132	Bushing 1-1/4"ID x 1-1/2"OD x 2"	47.	RG281	Front Frame
15.	T69	5/8" Lock Washer	49.	RG226	Reach
16.	RG291	Telepole Stop	50.	RG161	Back Frame
17.	RG239	Pole	51.	RG162	Bolt 1" x 2" GR.5
18.	RG138	1-1/4" Star Washer	52.	RG163	1" Top Lock Nut
19.	RG139	1-1/4" Jam Nut	53.	RG164	Back Spindle
20.	RG15	Bolt 5/8" x 1-3/4"	54.	RG165	Seal
21.	RG140	Bushing 1-1/4"ID x 1-1/2"OD x 1-1/8"	55.	RG166	Inner Bearing
22.	T56	Cotter Pin 5/32" x 2"	56.	RG167	Inner Race
23.	BFR228	1-1/4" Slotted Nut	57.	RG168	Hub
24.	RG17	1" Slotted Nut	58.	RG71	Stud Bolt
25.	RG173	Bushing 1"ID x 1-1/4"OD x 2"	59.	RG72	Nut
26.	RG141	Tie Rod	60.	RG169	Outer Race
27.	T60	5/8" Top Lock Nut	61.	RG170	Outer Bearing
28.	RG142	Pole Pivot	62.	RG183	Washer
29.	RG21	45 Degree Grease Zerk	63.	RG171	Hub Cap
30.	RG143	Pole Pin	64.	12V36	Wheel 16.1 x 14
31.	RG144	RH Front Spindle	65.	RG51	90 Degree Grease Zerk
32.	RG280	Bearing	68.	RG184	Nut
			69.	RG185	Cotter Pin 7/32" x 2"

FIGURE 10
MODEL 412

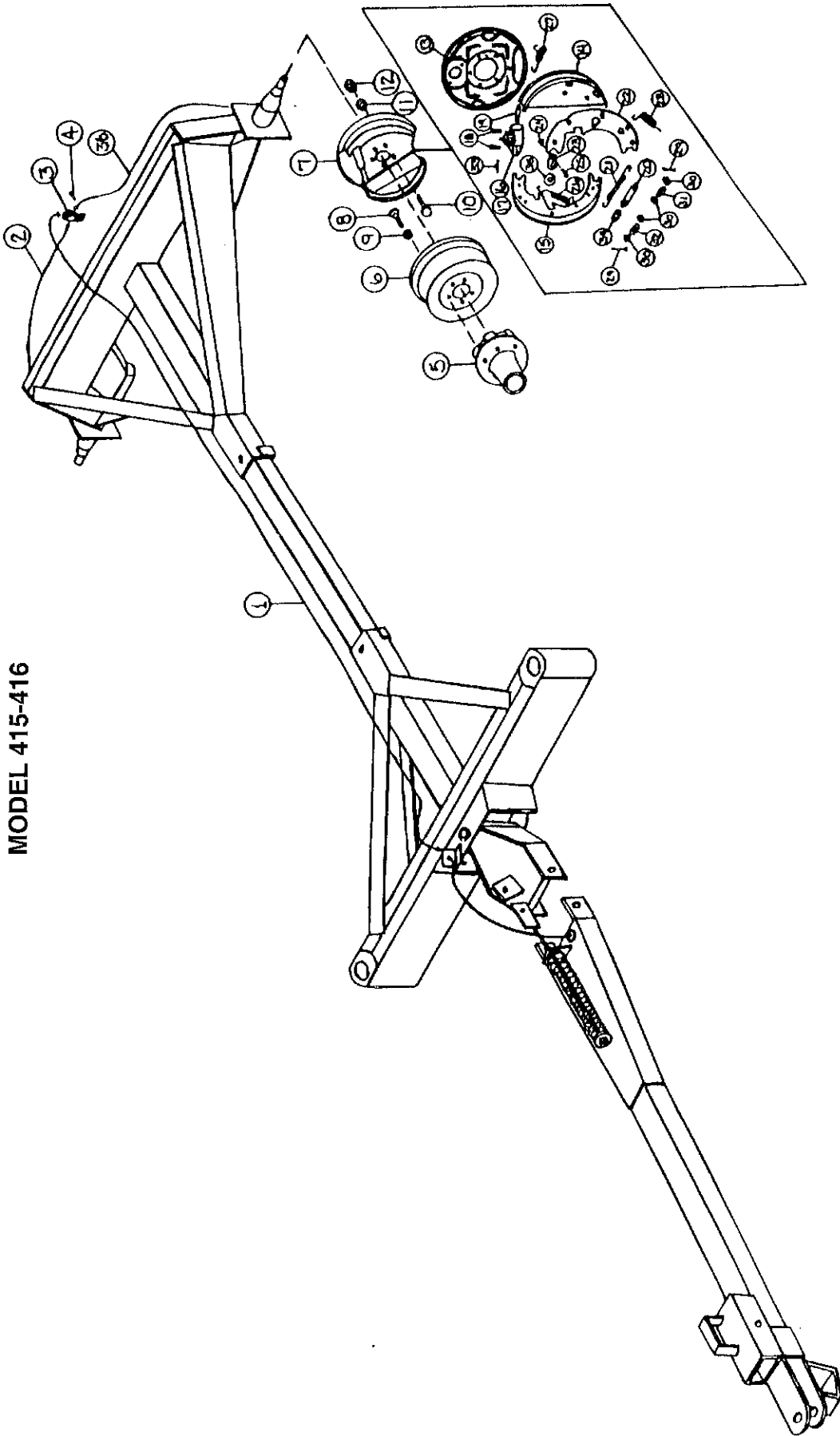


**FIGURE 10 – MODEL 412
BRAKE ASSEMBLY
RUNNING GEAR BRAKE KITS**

ITEM	412	DESCRIPTION
1.	RGB22	Brake Line 180"
2.	RGB36	Brake Line 36"
3.	RGB26	Tee
4.	RGB63	5/16 x 1" Self-Tapping Bolt
5.	RGB33	Hub (Complete Brake Hub Assembly)
6.	RGB32	Brake Drum
7.	RGB30	Brake Cluster Left
*	RGB31	Brake Cluster Right
8.	RGB64	Cap Screw
9.	RGB65	Lock Washer
10.	RGB66	Cap Screw
11.	RGB67	Lock Washer
12.	RGB68	Nut
13.	RGB42	Back Plate Assembly
14.	RGB43	Front Shoe Assembly
15.	RGB44	Rear Shoe Assembly
16.	RGB45	Wheel Cylinder Assembly RH
17.	RGB46	Wheel Cylinder Assembly LH
18.	RGB47	Screw & Lock Washer
19.	RGB48	Push Rod
20.	RGB49	Adjusting Screw Assembly
21.	RGB50	Spring Adjusting Screw
22.	RGB51	Shoe Lever
23.	RGB52	Travel Link
24.	RGB53	Lock Nut
25.	RGB54	Hex Cap Screw
26.	RGB55	Spring - Shoe
27.	RGB56	Spring - Lever
28.	RGB57	Spring - Shoe
29.	RGB56	Pin - Shoe Hold down
30.	RGB57	Cup - Shoe Hold down
31.	RGB58	Spring - Hold down (Yellow)
32.	RGB59	Spring - Hold down (Black)
33.	RGB60	Cover Plate
34.	RGB61	Socket
35.	RGB62	Washer
36.	RGB91	Brake Line 43"
*	RGB40	Complete Brake Kit Assembly

NOTE: * (MEANS NOT SHOWN)

FIGURE 11
MODEL 415-416

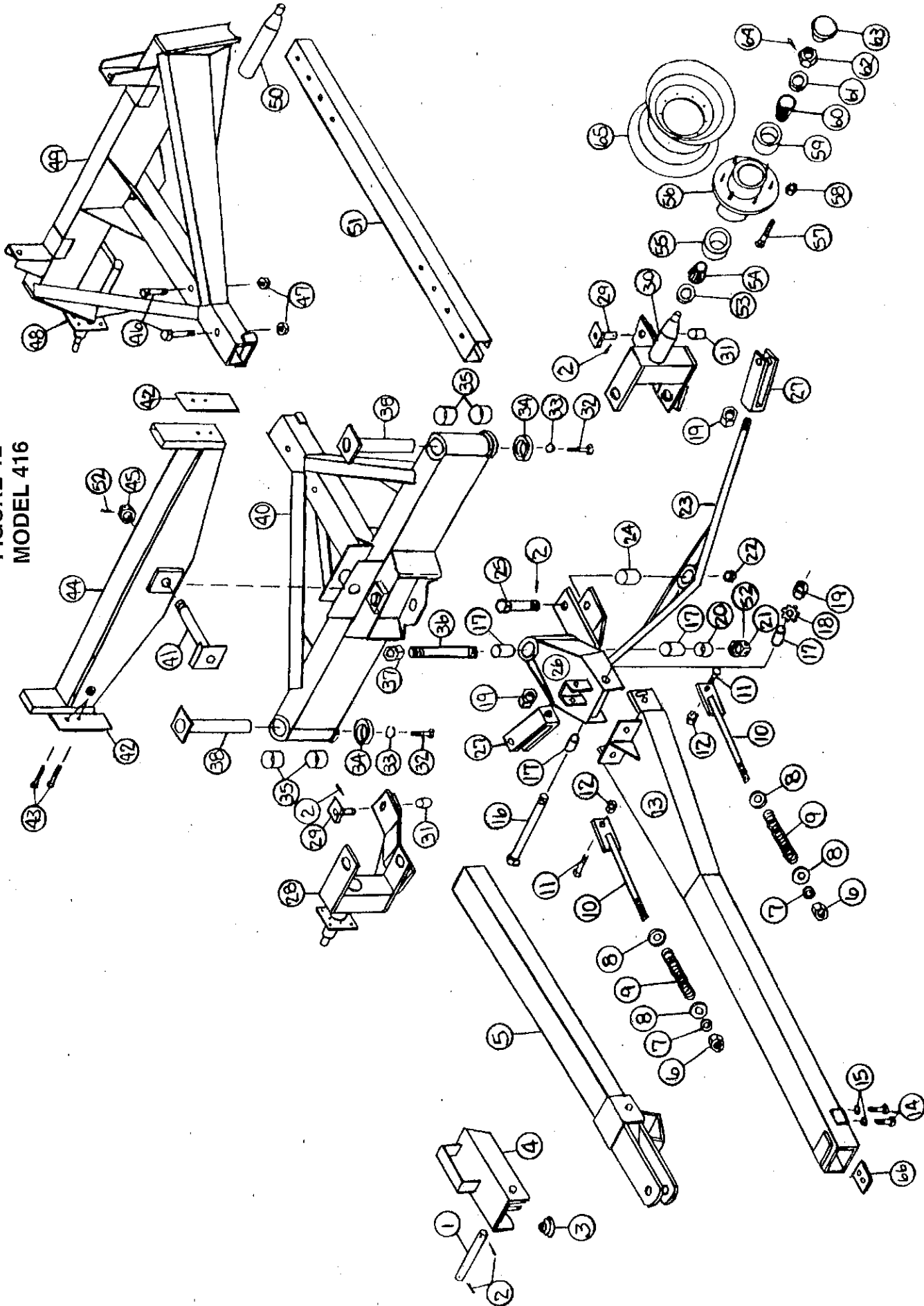


**FIGURE 11 – MODEL 415-416
BRAKE ASSEMBLY
RUNNING GEAR BRAKE KITS**

ITEM	415	DESCRIPTION
1.	RGB22	Brake Line 180"
2.	RGB36	Brake Line 36"
3.	RGB26	Tee
4.	RGB63	5/16 x 1" Self-Tapping Bolt
5.	RGB35	Hub (Complete Brake Hub Assembly)
6.	RGB34	Brake Drum
7.	RGB30	Brake Cluster Left
*	RGB31	Brake Cluster Right
8.	RGB64	Cap Screw
9.	RGB65	Lock Washer
10.	RGB66	Cap Screw
11.	RGB67	Lock Washer
12.	RGB68	Nut
13.	RGB42	Back Plate Assembly
14.	RGB43	Front Shoe Assembly
15.	RGB44	Rear Shoe Assembly
16.	RGB45	Wheel Cylinder Assembly RH
17.	RGB46	Wheel Cylinder Assembly LH
18.	RGB47	Screw & Lock Washer
19.	RGB48	Push Rod
20.	RGB49	Adjusting Screw Assembly
21.	RGB50	Spring Adjusting Screw
22.	RGB51	Shoe Lever
23.	RGB52	Travel Link
24.	RGB53	Lock Nut
25.	RGB54	Hex Cap Screw
26.	RGB55	Spring - Shoe
27.	RGB75	Spring - Lever
28.	RGB76	Spring - Shoe
29.	RGB56	Pin - Shoe Hold down
30.	RGB57	Cup - Shoe Hold down
31.	RGB58	Spring - Hold down (Yellow)
32.	RGB59	Spring - Hold down (Black)
33.	RGB60	Cover Plate
34.	RGB61	Socket
35.	RGB62	Washer
36.	RGB91	Brake Line 43"
*	RGB41	Complete Brake Kit Assembly

NOTE: * (MEANS NOT SHOWN)

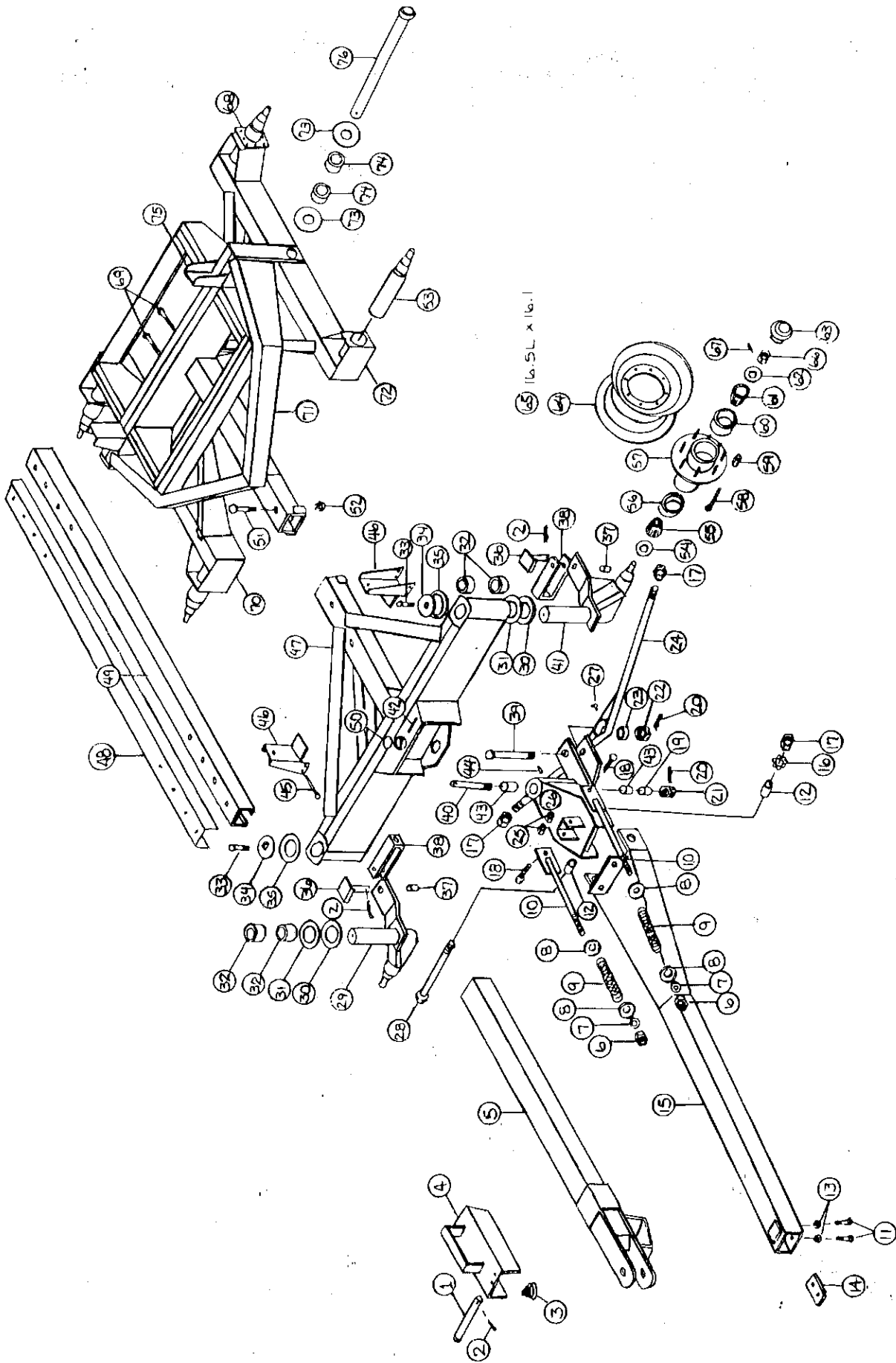
FIGURE 12
MODEL 416



**FIGURE 12 – MODEL 416
16 TON RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG130	Latch Clevis Pin	34.	RG248	Bearing
2.	T72	Cotter Pin 5/32" x 1-1/2"	35.	RGT3	Bushing 1-49/64"ID x 2"OD x 2"
3.	RG228	Latch Spring	36.	RG289	Steering Pin
4.	RG233	Latch	37.	RG139	Jam Nut 1-1/4"
5.	RG241	Telepole	38.	RG249	King Pins
6.	RG7	5/8" Nylon Lock Nut	40.	RG250	Front Frame
7.	RG8	5/8" Flat Washer	41.	RG204	Bolster Pivot Pin
8.	RG9	Spring Retainer	42.	RG251	Bolster Anti-Rock Plate
9.	T148	Spring	43.	R10	1/2" x 1-1/4" Bolt GR.5
10.	RG10	Adjustment Rod	44.	RG206	Bolster
11.	RG15	5/8" x 1-3/4" Bolt	45.	BFR481	1-1/2" Slotted Nut
12.	T60	5/8" Top Lock Nut	46.	RG162	1// x 2" Bolt GR.5
13.	RG239	Pole	47.	RG163	1" Top Lock Nut
14.	T62	5/8" x 1-1/2" Bolt GR.5	48.	RG172	Brake Mount
15.	T69	5/8" Lock Washer	49.	RG252	Back Frame
16.	RG143	Pole Bolt	50.	RG164	Back Spindle
17.	RG132	Bushing 1-17/64"ID x 1-1/2"OD x 2"	51.	RG226	Reach
18.	RG138	1-1/4" Star Washer	52.	RG219	Cotter Pin 5/32" x 2-1/2"
19.	RG139	1-1/4" Jam Nut	53.	RG165	Seal
20.	RG140	Bushing 1-17/64"ID x 1-1/2"OD x 1-1/8"	54.	RG166	Inner Bearing
21.	BFR228	1-1/4" Slotted Nut	55.	RG167	Inner Race
22.	RG17	1" Slotted Nut	56.	RG168	Hub
23.	RG245	Tie Rod	57.	RG71	Stud Bolt
24.	RG173	Bushing 1-1/64"ID x 1-1/4"OD x 2"	58.	RG72	Nut
25.	RG153	Tie Rod Center Bolt	59.	RG169	Outer Race
26.	RG142	Pole Pivot	60.	RG170	Outer Bearing
27.	RG152	Clevis	61.	RG183	Washer
28.	RG246	RH Front Spindle	62.	RG184	Nut
29.	RG150	Clevis Pin	63.	RG171	Hub Cap
30.	RG247	LH Front Spindle	64.	RG185	Cotter Pin
31.	RG151	Bushing 1"ID x 1-1/4"OD x 1-1/4"	65.	RG253	Wheel 14 x 16.1
32.	T62	Bolt 5/8" X 1-1/2" Bolt GR.5	66.	RG291	Wagon Telepole Stop
33.	T69	5/8" Lock Washer			

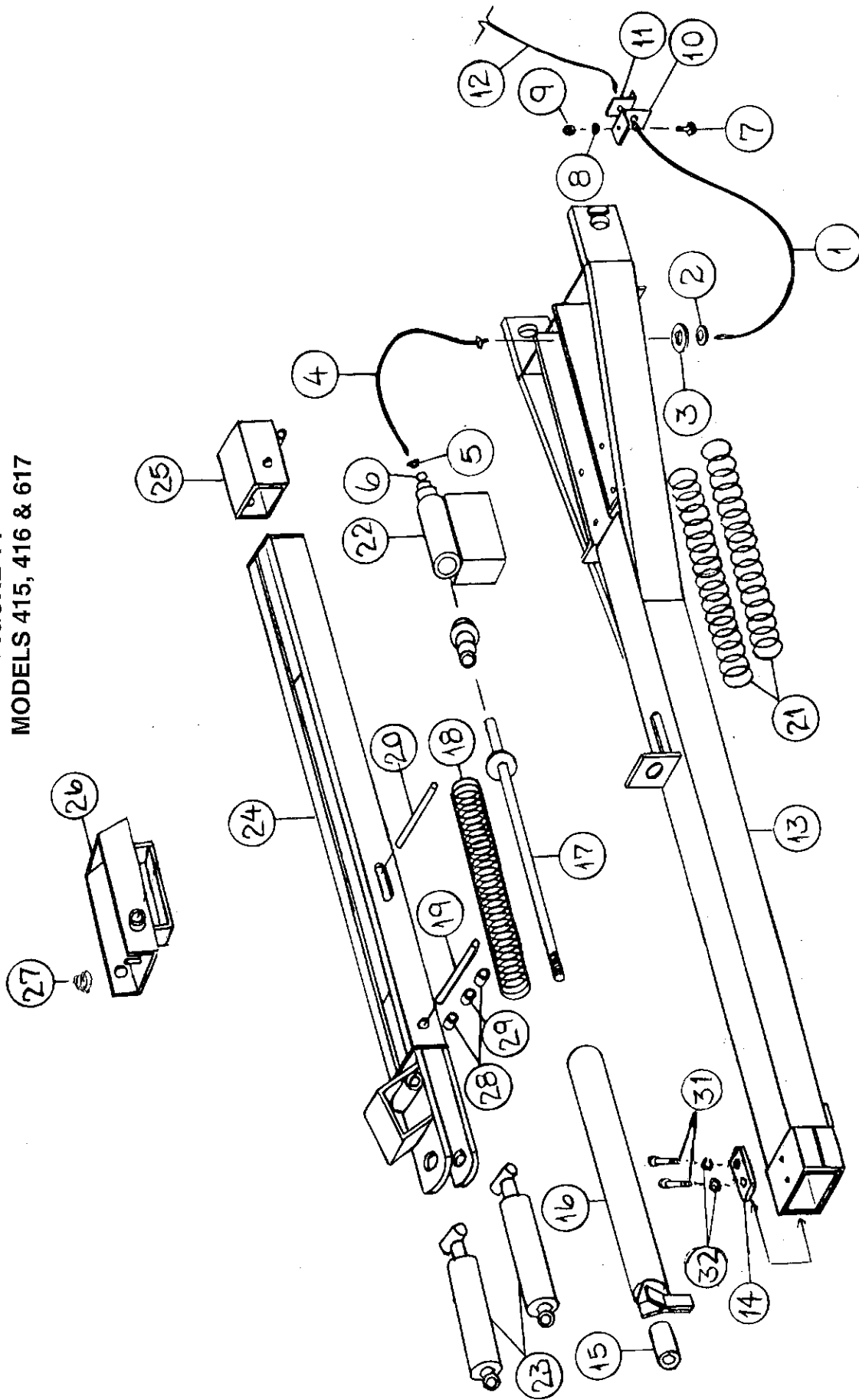
FIGURE 13
MODEL 617



**FIGURE 13 – MODEL 617
17 TON RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG130	Clevis Pin	38.	RG152	Clevis
2.	T72	Cotter Pin 5/32" x 1-1/2"	39.	RG153	Tie Rod Center Bolt
3.	RG228	Latch Spring	40.	RG289	Steering Pin
4.	RG233	Latch	41.	RG155	LH Front Spindle
5.	RG241	Telepole	42.	RG139	Jam Nut 1-1/4"
6.	RG7	5/8" Nylon Lock Nut	43.	RG132	Bushing
7.	RG8	5/8" Flat Washer	44.	RG51	90 Degree Grease Zerk
8.	RG9	Spring Retainer	45.	RG156	Bolt 1/2 x 5-1/2" GR.5
9.	T148	Spring	46.	RG227	Stake Pocket
10.	RG10	Adjustment Rod	47.	RG281	Front Frame
11.	T62	Bolt 5/8" x 1-1/2" GR.5	49.	RG226	Reach
12.	RG132	Bushing 1-1/4"OD x 1-1/2"ID x 2"	51.	RG162	Bolt 1" x 2" GR.5
13.	T69	5/8" Lock Washer	52.	RG163	1" Top Lock Nut
14.	RG291	Telepole Stop	53.	RG243	Back Spindle
15.	RG239	Pole	54.	RG165	Seal
16.	RG138	1-1/4" Star Washer	55.	RG166	Inner Bearing
17.	RG139	1-1/4" Jam Nut	56.	RG167	Inner Race
18.	RG15	Bolt 5/8" x 1-3/4"	57.	RG168	Hub
19.	RG140	Bushing 1-1/4"ID x 1-1/2"OD x 1-1/8"	58.	RG71	Stud Bolt
20.	T56	Cotter Pin 5/32" x 2"	59.	RG72	Nut
21.	BFR228	1-1/4" Slotted Nut	60.	RG169	Outer Race
22.	RG17	1" Slotted Nut	61.	RG170	Outer Bearing
23.	RG173	Bushing 1"ID x 1-1/4"OD x 2"	62.	RG183	Washer
24.	RG141	Tie Rod	63.	RG171	Hub Cap
25.	T60	5/8" Top Lock Nut	64.	12V36	Wheel 16.1 x 14
26.	RG142	Pole Pivot	66.	RG164	Nut
27.	RG21	45 Degree Grease Zerk	67.	RG185	Cotter Pin 7/32" x 2"
28.	RG143	Pole Pin	68.	RG172	Brake Mount
29.	RG144	RH Front Spindle	69.	RG174	Bolt 5/8" x 5" GR.5
30.	RG280	Bearing	70.	RG175	RH Tandem Axle Assembly
32.	RG147	Bushing 2-3/4"ID x 3"OD x 3"	71.	RG176	Back Frame
33.	RG27	Spindle Bolt 3/8" x 1" GR.5	72.	RG177	LH Tandem Axle Assembly
34.	RG148	Front Spindle Cap	73.	RG178	Tandem Pin Washer
35.	RG149	Poly Washer	74.	RG60	Tandem Pin Bushing
36.	RG150	Clevis Pin	75.	RG180	Stake Pocket
37.	RG151	Bushing 1"ID x 1-1/4"OD x 1-1/4"	76.	RG179	Tandem Pin

FIGURE 14
MODELS 415, 416 & 617

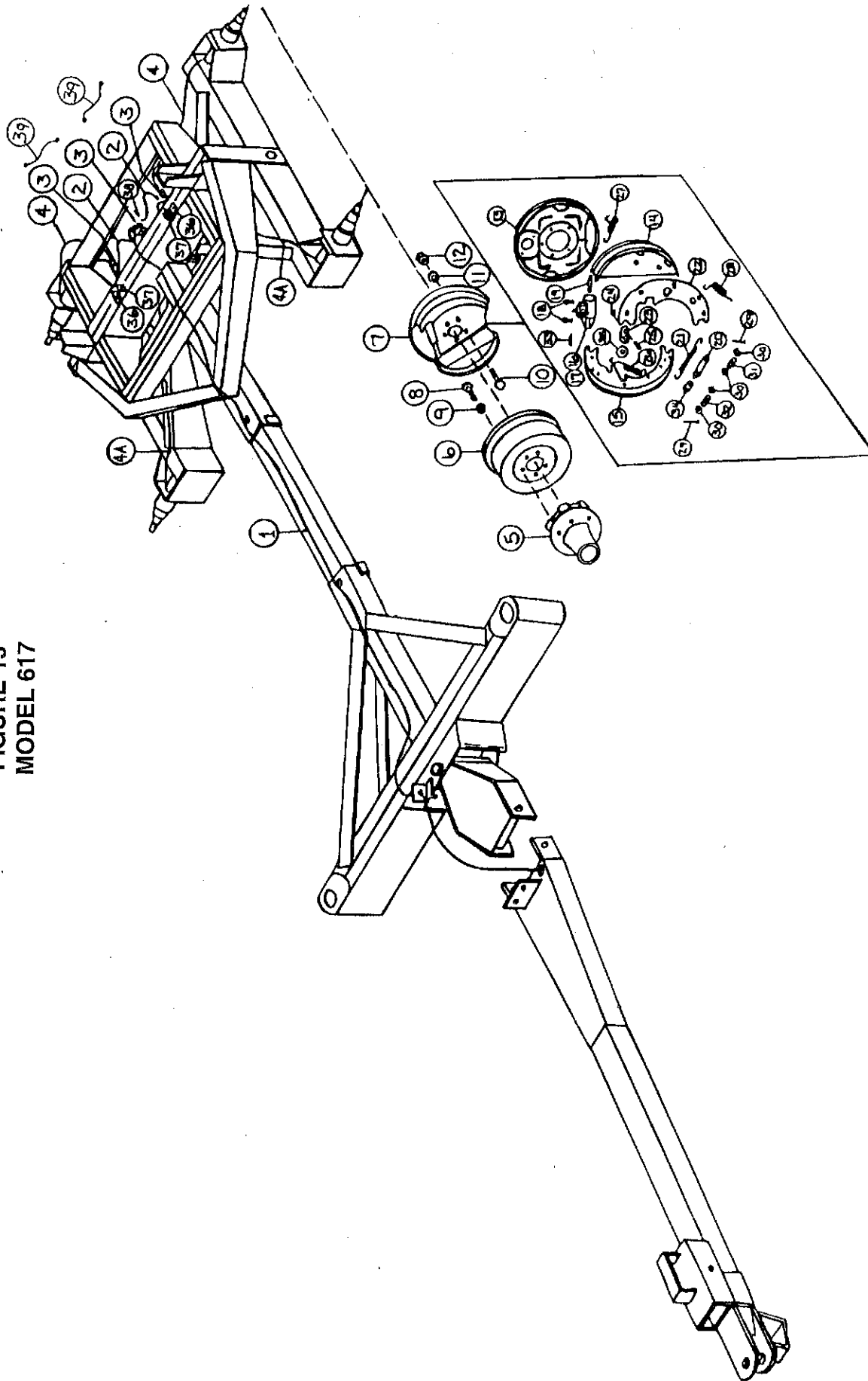


**FIGURE 14 – MODELS 415, 416 & 617
POLE ASSEMBLY
RUNNING GEAR BRAKE KITS**

ITEM	415	416	617	DESCRIPTION
1.	RGB24	"	"	Brake Hose 18-7/8"
2.	RG8	"	"	Flat Washer 5/8"
3.	12V96	"	"	Poly Washer
4.	RGB25	"	"	Brake Hose
5.	RGB20	"	"	Brass Connector
6.	RGB21	"	"	Brass Gasket
7.	RGB38	"	"	5/16" x 1" Hex Bolt
8.	RGB39	"	"	5/16" Lock Washer
9.	T116	"	"	5/16" Nut
10.	RGB122	"	"	Hose Bracket
11.	RGB28	"	"	Hose Clip
12.	RGB22	"	"	Brake Line 1010865-180"
13.	RGB119	"	"	Pole Assembly
14.	RG291	"	"	Stop Block
15.	RGB3	"	"	Push Rod End
16.	RGB4	"	"	Spring Shield
17.	RGB5	"	"	Push Rod
18.	RGB29	"	"	Spring Push Rod
19.	RGB10	"	"	Damper Pin
20.	RGB121	"	"	Damper Pin
21.	T148	"	"	Pole Lift Spring
22.	RGB19	"	"	Master Cylinder
23.	RGB18	"	"	Damper
24.	RGB11	"	"	Telepole Assembly
25.	RGB112	"	"	Telepole Stop
26.	RGB113	"	"	Latch
27.	RG228	"	"	Latch Spring.
28.	RGB100	"	"	Damper Holder
29.	RGB101	"	"	Damper Spacer
31.	T62	"	"	Bolt 5/8-11 x 1-1/2" GR.5
32.	T69	"	"	5/8" Lock Washer

NOTE: " (MEANS SAME AS PRECEDING NUMBER)

FIGURE 15
MODEL 617

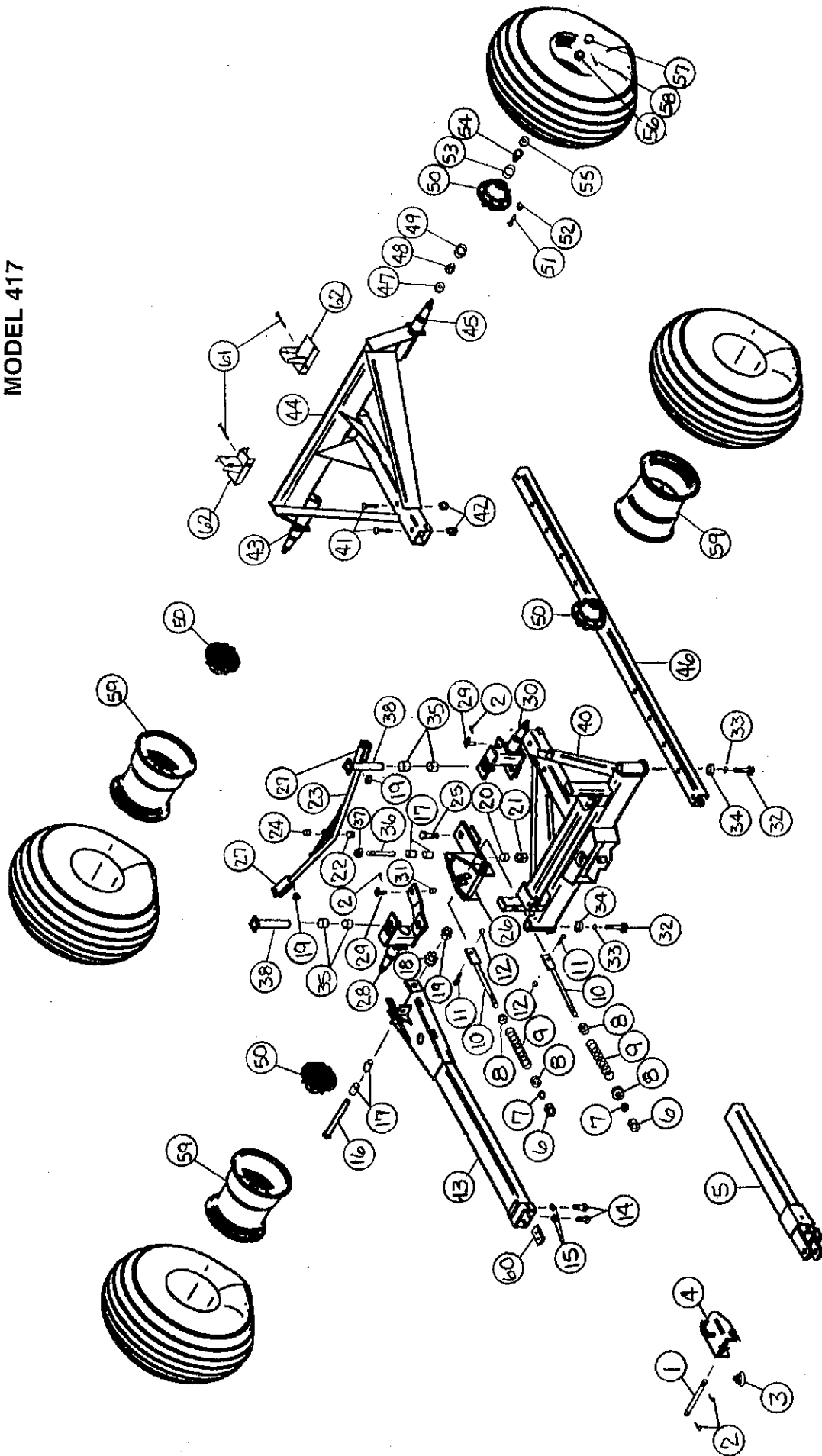


**FIGURE 15 – MODEL 617
617 TANDEM 2 & 4 WHEEL BRAKE KITS
BRAKE ASSEMBLY**

ITEM	(2 WHEEL BRAKE KIT)	(4 WHEEL BRAKE KIT)	DESCRIPTION
	617	617	
1.	RGB22	"	180" Brake Line
2.	RGB24	"	Brake Hose 18-7/8"
3.	RGB26	"	Tee
4.	RGB36	"	36" Brake Line
4A.	-	RGB91	43" Brake Line
5.	RGB35	"	Hub (Complete Brake Hub Assembly)
6.	RGB34	"	Brake Drum
7.	RGB31	"	Brake Cluster LH
*	RGB30	"	Brake Cluster RH
8.	RGB64	"	Cap Screw
9.	RGB65	"	Lock Washer
10.	RGB66	"	Cap Screw
11.	RGB67	"	Lock Washer
12.	RGB68	"	Nut
13.	RGB42	"	Back Plate Assembly
14.	RGB43	"	Front Shoe Assembly
15.	RGB44	"	Rear Shoe Assembly
16.	RGB45	"	Wheel Cylinder Assembly RH
17.	RGB46	"	Wheel Cylinder Assembly LH
18.	RGB47	"	Screw and Lock Washer
19.	RGB48	"	Push Rod
20.	RGB49	"	Adjusting Screw Assembly
21.	RGB50	"	Spring Adjusting Screw
22.	RGB51	"	Shoe Lever
23.	RGB52	"	Travel Link
24.	RGB53	"	Lock Nut
25.	RGB54	"	Hex Cap - Screw
26.	RGB55	"	Spring - Shoe
27.	RGB75	"	Spring - Lever
28.	RGB76	"	Spring - Shoe
29.	RGB56	"	Pin - Shoe Hold down
30.	RGB57	"	Cup - Shoe Hold down
31.	RGB58	"	Spring - Hold down (Yellow)
32.	RGB59	"	Spring - Hold down (Black)
33.	RGB60	"	Cover Plate
34.	RGB61	"	Socket
35.	RGB62	"	Washer
36.	RGB27	"	Hose Bracket
37.	RGB28	"	Clip
38.	RGB63	"	5/16" x 1" Self-Tapping Bolt
*	RGB89	RGB90	Complete Brake Kit for 617
39.	-	RGB105	Brake Line - 4-1/2"

NOTE: * (MEANS NOT SHOWN)
- (MEANS NOT USED ON THIS MODEL)

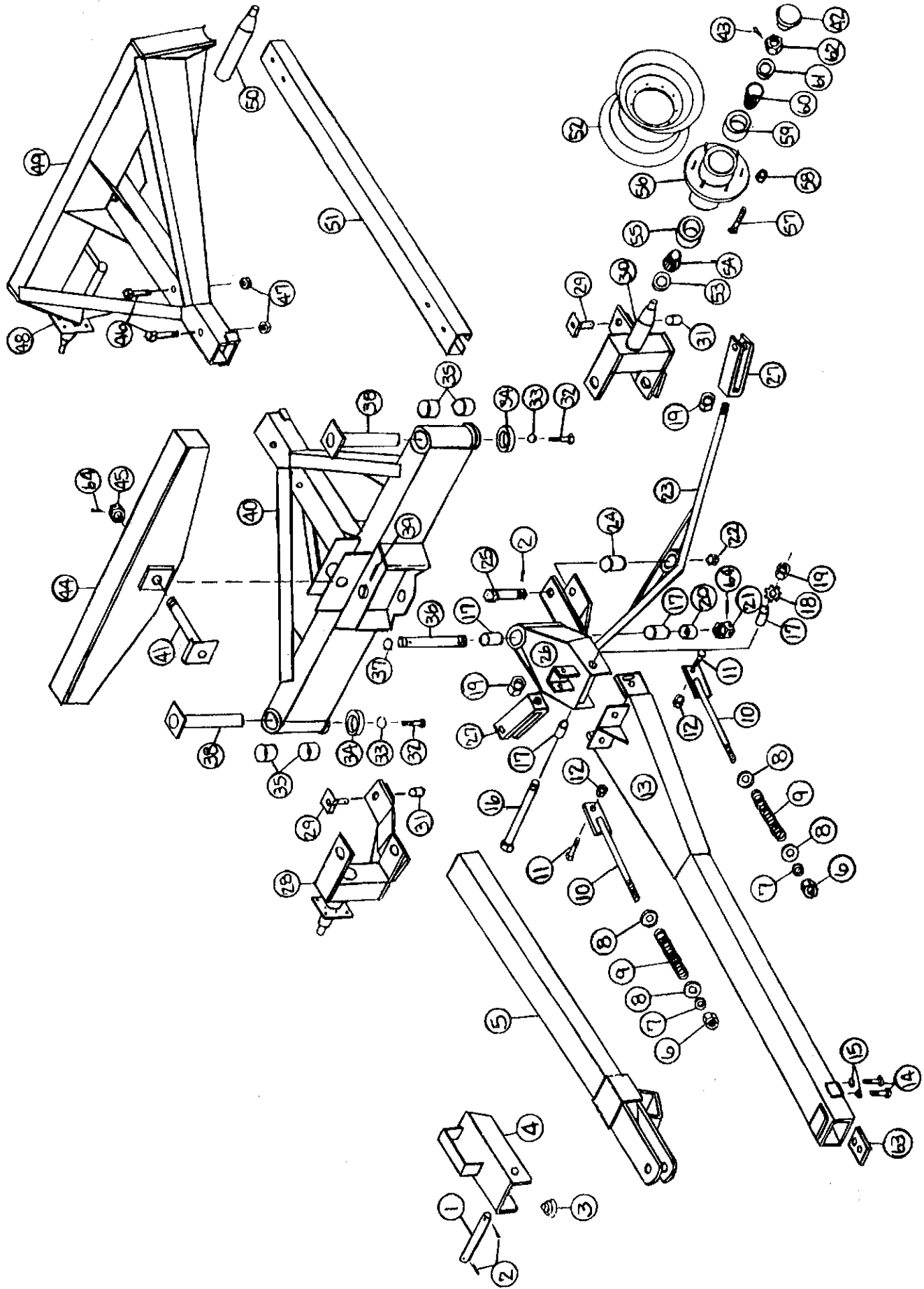
FIGURE 16
MODEL 417



**FIGURE 16 – MODEL 417
17 TON RUNNING GEAR**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG186	Latch Clevis Pin	33.	RG199	3/4" Lock Washer
2.	T56	Cotter Pin 5/32" x 2"	34.	RG200	Bearing
3.	RG228	Latch Spring	35.	RG26	Bushing 2-1/64"ID x 2-1/4"OD x 2"
4.	RG234	Latch	36.	RG290	Steering Pin
5.	RG242	Telepole	37.	RG139	Jam Nut 1-1/4"
6.	RG7	5/8" Nylon Lock Nut	38.	RG202	King Pins
7.	RG8	5/8" Flat Washer	40.	RG284	Front Frame
8.	RG9	Spring Retainer	41.	RG162	Bolt 1"x2" GR.5
9.	T148	Spring	42.	RG163	1" Top Lock Nut
10.	RG10	Adjustment Rod	43.	RG207	Brake Mount
11.	RG15	5/8" x 1-3/4" Bolt	44.	RG285	Back Frame
12.	T60	5/8" Top Lock Nut	45.	RG209	Back Spindle
13.	RG240	Pole	46.	RG226	Reach
14.	T62	5/8" x 1-1/2" Bolt GR.5	47.	33SV42	Seal
15.	T69	5/8" Lock Washer	48.	33SV43	Inner Bearing
16.	RG190	Pole Bolt	49.	33SV44	Inner Race
17.	RG132	Bushing 1-17/64"ID x 1-1/2"OD x 2"	50.	33SV45	Hub
18.	RG138	1-1/4" Star Washer	51.	33SV41	Stud Bolt
19.	RG139	1-1/4" Jam Nut	52.	RG72	Nut
20.	RG191	Bushing 1-17/64"ID x 1-1/2"OD x 1"	53.	RG169	Outer Race
21.	BFR228	1-1/4" Slotted Nut	54.	RG170	Outer Bearing
22.	RG17	1" Slotted Nut	55.	33SV95	Washer
23.	RG192	Tie Rod	56.	T35	Nut
24.	RG11	Bushing 1-1/64"ID x 1-1/4"OD x 2"	57.	RG171	Hub Cap
25.	RG193	Tie Rod Center Bolt	58.	33SV46	Cotter Pin
26.	RG194	Pole Pivot	59.	RG212	Wheel 16 x 16.1
27.	RG195	Clevis	60.	RG291	Wagon Telepole Stop
28.	RG282	RH Front Spindle	61.	RG156	Bolt 1/2" x 5-1/2" GR.5
29.	RG197	Clevis Pin	62.	RG227	Stake Pocket
30.	RG283	LH Front Spindle	OPTION		
31.	RG151	Bushing 1"ID x 1-1/4"OD x 1-1/4"	RG211	Wheel 14 x 16.1	
32.	RG218	Bolt 3/4" x 1-1/2" GR.5			

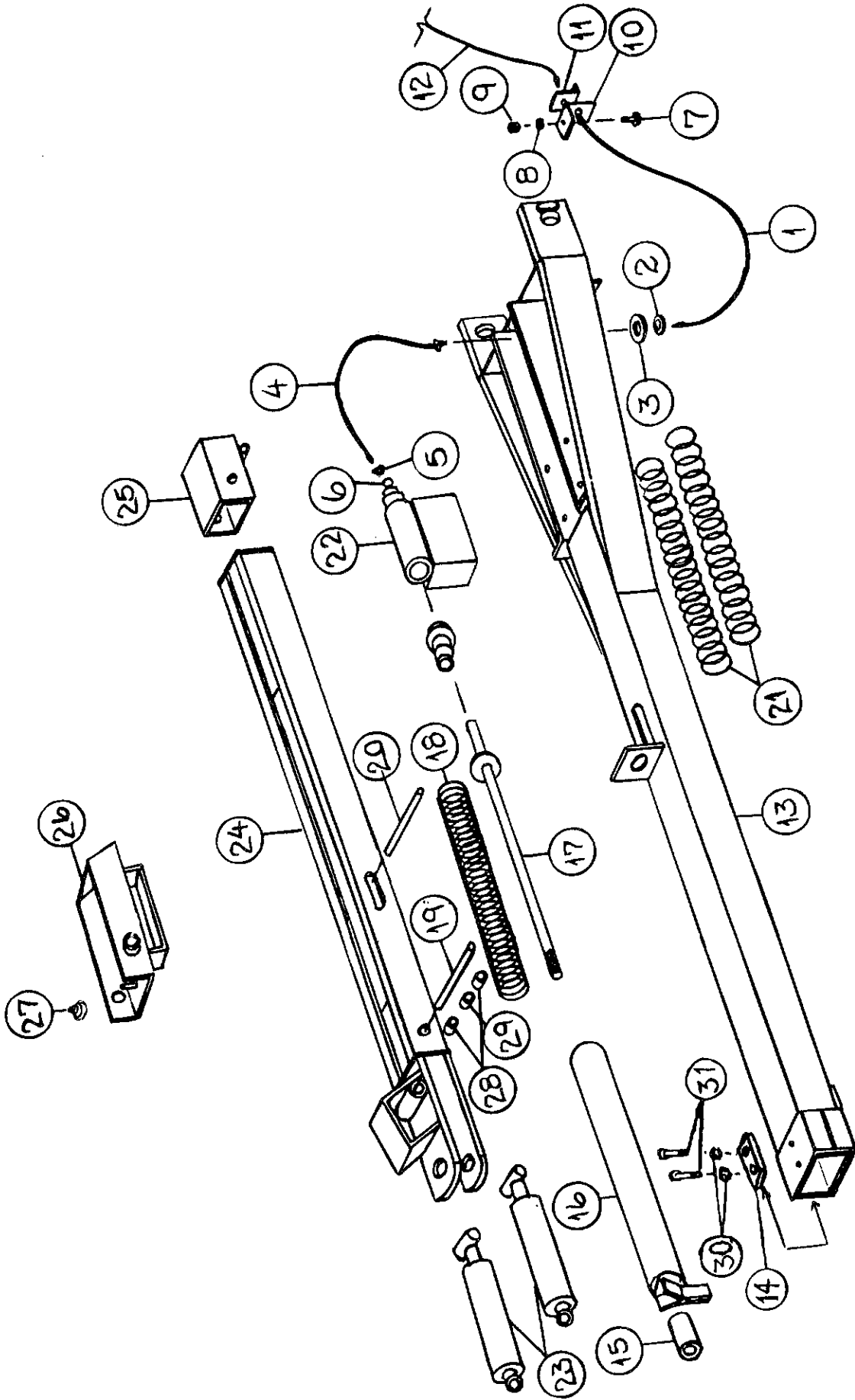
FIGURE 17
MODEL 417 - 100" TREAD WIDTH



**FIGURE 17 – MODEL 417
17 TON RUNNING GEAR – 100" TREAD WIDTH**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1.	RG186	Latch Clevis Pin	34.	RG200	Bearing
2.	T56	Cotter Pin 5/32" x 2"	35.	RG26	Bushing 2-1/64"ID x 2-1/4"OD x 2"
3.	RG228	Latch Spring	36.	RG290	Steering Pin
4.	RG234	Latch	37.	RG139	Jam Nut 1-1/4"
5.	RG242	Telepole	38.	RG202	King Pins
6.	RG7	5/8" Nylon Lock Nut	40.	RG214	Front Frame
7.	RG8	5/8" Flat Washer	41.	RG220	Bolster Pivot Pin
8.	RG9	Spring Retainer	42.	RG171	Hub Cap
9.	T148	Spring	43.	33SV46	Cotter Pin
10.	RG10	Adjustment Rod	44.	RG215	Bolster
11.	RG15	5/8" x 1-3/4" Bolt	45.	BFR481	1-1/2" Slotted Nut
12.	T60	5/8" Top Lock Nut	46.	RG162	1" x 2" Bolt GR.5
13.	RG240	Pole	47.	RG163	1" Top Lock Nut
14.	T62	5/8" x 1-1/2" Bolt GR.5	48.	RG207	Brake Mount
15.	T69	5/8" Lock Washer	49.	RG216	Back Frame
16.	RG190	Pole Bolt	50.	RG209	Back Spindle
17.	RG132	Bushing 1-17/64"ID x 1-1/2"OD x 2"	51.	RG226	Reach.
18.	RG138	1-1/4" Star Washer	52.	RG211	Wheel 14 x 16.1
19.	RG139	1-1/4" Jam Nut		OPTION	
20.	RG191	Bushing 1-17/64"ID x 1-1/2"OD x 1"		RG212	Wheel 16 x 16.1
21.	BFR228	1-1/4" Slotted Nut	53.	33SV42	Seal
22.	RG17	1" Slotted Nut	54.	33SV43	Inner Bearing
23.	RG213	Tie Rod	55.	33SV44	Inner Race
24.	RG11	Bushing 1-1/64"ID x 1-1/4"OD x 2"	56.	33SV45	Hub
25.	RG193	Tie Rod Center Bolt	57.	33SV41	Stud Bolt
26.	RG194	Pole Pivot	58.	RG72	Nut
27.	RG195	Clevis	59.	RG169	Outer Race
28.	RG196	RH Front Spindle	60.	RG170	Outer Bearing
29.	RG197	Clevis Pin	61.	33SV95	Washer
30.	RG198	LH Front Spindle	62.	T35	Nut
31.	RG151	Bushing 1"ID x 1-1/4"OD x 1-1/4"	63.	RG291	Wagon Telepole Stop
32.	RG218	Bolt 3/4" x 1-1/2" GR.5	64.	RG219	Cotter Pin 5/32" x 2-1/2"
33.	RG199	3/4" Lock Washer			

FIGURE 18
 MODELS 417 & 417-100" POLE

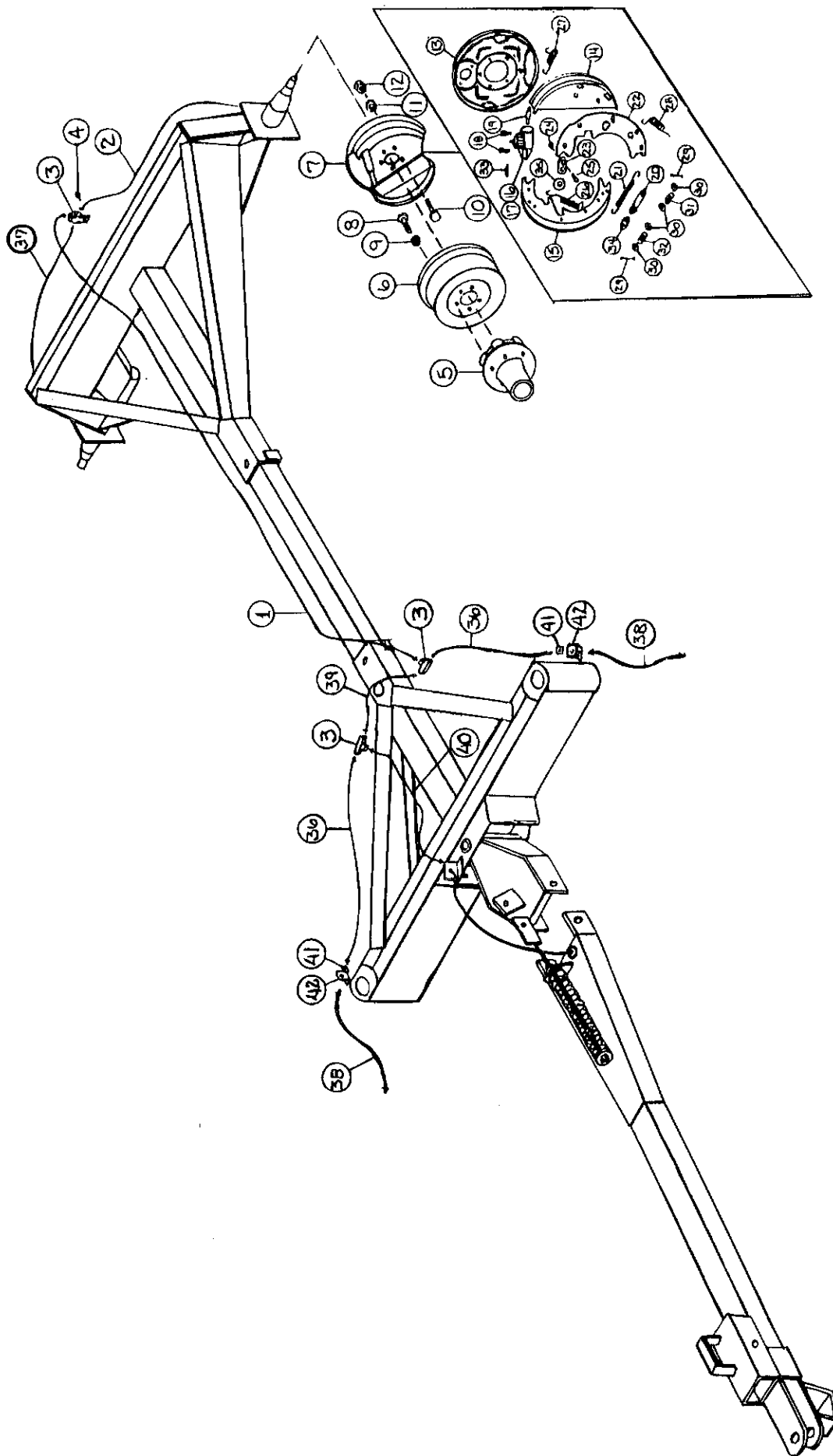


**FIGURE 18 – MODELS 417 & 417-100”
POLE ASSEMBLY RUNNING GEAR BRAKE KITS**

ITEM	417	417-100”	DESCRIPTION
1.	RGB24	”	Brake Hose 18-7/8”
2.	RG8	”	Flat Washer 5/8”
3.	12V96	”	Poly Washer
4.	RGB25	”	Brake Hose 13”
5.	RGB20	”	Brass Connector
6.	RGB21	”	Brass Gasket
7.	RGB38	”	5/16” x 1” Hex. Bolt
8.	RGB39	”	5/16” Lock Washer
9.	T116	”	5/16” Nut
10.	RGB122	”	Hose Bracket
11.	RGB28	”	Hose Clip
12.	RGB93	”	Brake Line 48”
13.	RGB120	”	Pole Assembly
14.	RG291	”	Stop Block
15.	RGB3	”	Push Rod End
16.	RGB4	”	Spring Shield
17.	RGB5	”	Push Rod
18.	RGB29	”	Spring - Push Rod
19.	RGB95	”	Damper Pin 6-1/2”
20.	RGB96	”	Damper Pin
21.	RGB37	”	Pole Lift Spring
22.	RGB19	”	Master Cylinder
23.	RGB18	”	Damper
24.	RGB97	”	Telepole Assembly
25.	RGB114	”	Telepole Stop
26.	RGB117	”	Latch
27.	RG228	”	Latch Spring
28.	RGB100	”	Damper Holder
29.	RGB101	”	Damper Spacer
30.	T69	”	5/8” Lock Washer
31.	T62	”	Bolt 5/8” x 1-1/2” GR.5

NOTE: ” (MEANS SAME AS PRECEDING NUMBER)

FIGURE 19
MODELS 417 & 417-100"



**FIGURE 19 – MODELS 417 & 417-100”
BRAKE KITS – 2 OR 4 WHEEL
LINES, HOSES AND DRUM ASSEMBLY**

ITEM	PART NO.		DESCRIPTION
	417	417-100”	
1.	RGB22	”	Brake Line 180”
2.	RGB91	–	LH Brake Line 43”
*	–	RGB93	LH Brake Line 48”
3.	RGB26	–	Tee
4.	RGB63	”	5/16” x 1” Self-Tapping Bolt
5.	33SV45	”	Hub (Complete Brake Hub Assembly)
6.	RGB106	”	Brake Drum
7.	RGB30	”	Brake Cluster LH
*	RGB31	”	Brake Cluster RH
8.	RGB64	”	Cap Screw
9.	RGB65	”	Lock Washer
10.	RGB66	”	Cap Screw
11.	RGB67	”	Lock Washer
12.	RGB68	”	Nut
13.	RGB42	”	Back Plate Assembly
14.	RGB43	”	Front Shoe Assembly
15.	RGB44	”	Rear Shoe Assembly
16.	RGB45	”	Wheel Cylinder Assembly RH
17.	RGB46	”	Wheel Cylinder Assembly LH
18.	RGB47	”	Screw and Lock Washer
19.	RGB48	”	Push Rod
20.	RGB49	”	Adjusting Screw Assembly
21.	RGB50	”	Spring Adjusting Screw
22.	RGB51	”	Shoe Lever
23.	RGB52	”	Travel Link
24.	RGB53	”	Lock Nut
25.	RGB54	”	Hex Cap Screw
26.	RGB55	”	Spring - Shoe
27.	RGB75	”	Spring - Lever
28.	RGB76	”	Spring - Shoe
29.	RGB56	”	Pin - Shoe Hold down
30.	RGB57	”	Cup - Shoe Hold down
31.	RGB58	”	Spring - Hold down (Yellow)
32.	RGB59	”	Spring - Hold down (Black)
33.	RGB60	”	Cover Plate
34.	RGB61	”	Socket
35.	RGB62	”	Washer
36.	RGB36	–	Brake Line 36”
*	–	RGB91	Brake Line 43”
37.	RGB91	–	Brake Line RH 43”
*	–	RGB93	Brake Line RH 48”
38.	RGB24	”	Hose 18-7/8”
39.	RGB105	”	Brake Line 4-1/2”
40.	RGB93	”	Brake Line 48”
41.	RGB28	”	Hose Clip
42.	RGB27	”	Hose Bracket
NOT SHOWN	RGB107	RGB108	Complete Brake Kit Assembly

NOTE: * (MEANS NOT SHOWN)
 – (MEANS NOT USED ON THIS MODEL)
 ” (MEANS SAME AS PRECEDING NUMBER)

