

PARTS MANUAL

MB16, MB21, and MTB16 Scoot-Crete Power Buggies

(revised June 14, 2004)



This manual is for Miller MB16, MB21 and MTB16 Buggies

Table of Contents

General Arrangement and Decals-----	pages 1-2
Steering Column -----	pages 3-5
Braking System -----	pages 7-10
Hydraulic System -----	pages 11-15
Bucket Base -----	page 16
Speed Control -----	pages 17-18
Wheel Assemblies -----	pages 19-20
Dump Lever Linkage -----	pages 21-23
Track Assembly-----	pages 24-26

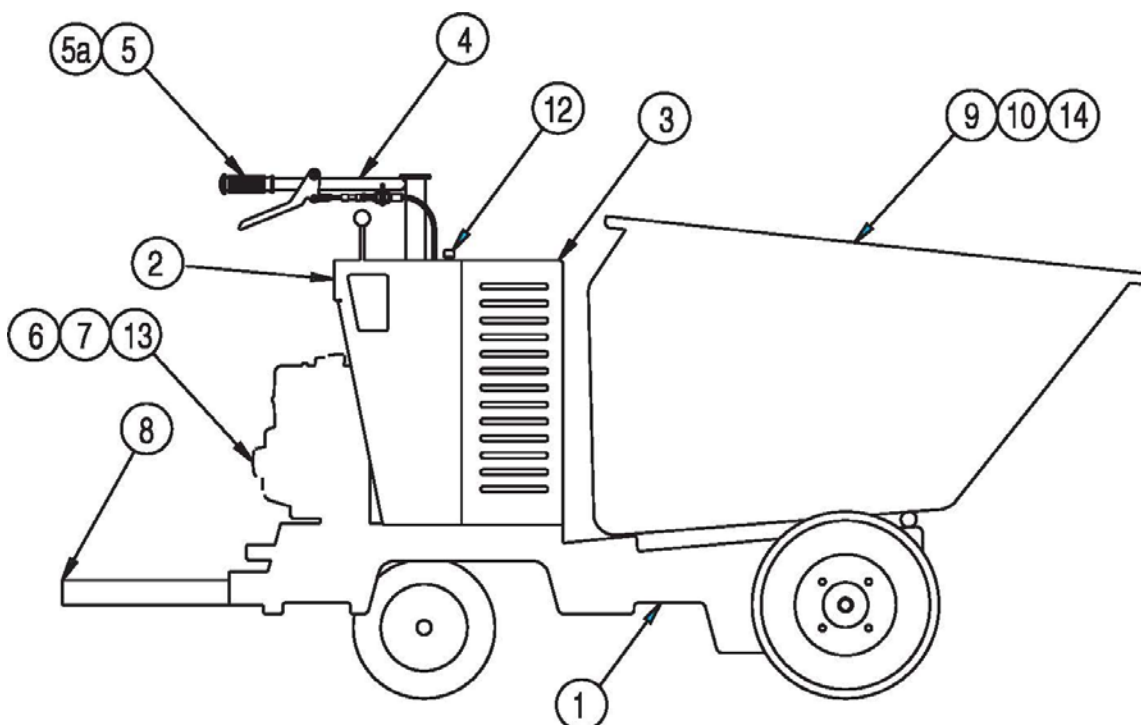


**UNLESS OTHERWISE SPECIFIED ALL
REPLACEMENT HARDWARE ON THIS MACHINE MUST CONFORM
TO SAE GRADE 5 OR 6 (THREE (3) OR (4) LINES ON BOLT HEAD)**

SPARK ARRESTER SERVICE

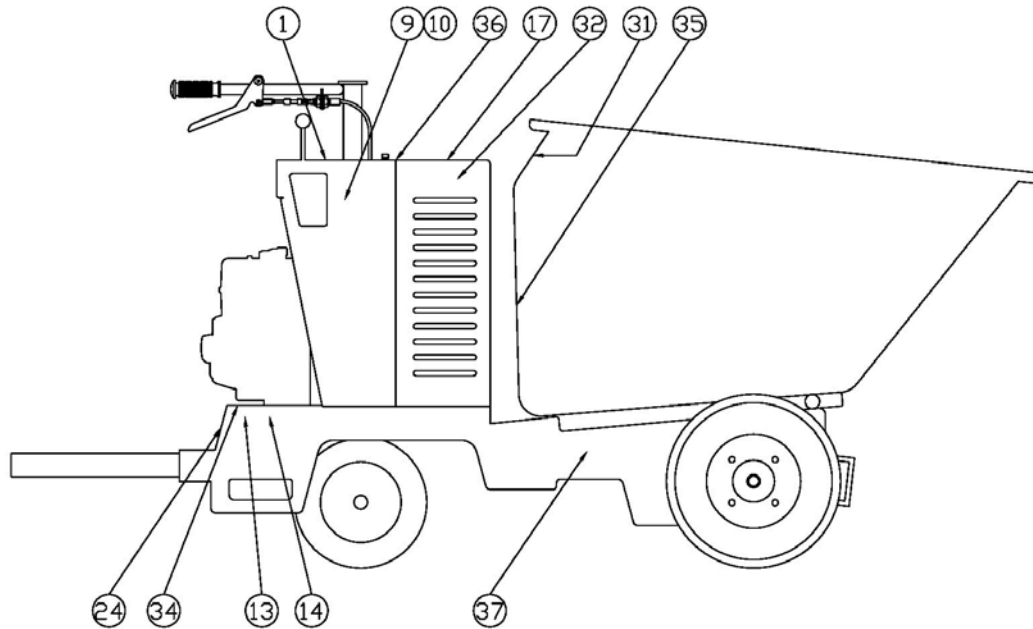
Your engine is not factory-equipped with a spark arrester. In some areas, it is illegal to operate an engine without a spark arrester. Check local laws and regulations. A spark arrester is available from authorized Honda dealers.

GENERAL ARRANGEMENT



ITEM	QTY	PART #	DESCRIPTION
1	1	42100-36	Main Frame 42100-01
2	1	42100-38	Console
3	1	42108-01	Hydraulic Reservoir Cover
4	1	42126-01	Standard Handle Bar Less Grips
5	1	42102-07	LH Handle Bar Grip
5a	1	42101-08	RH Handle Bar Grip
6	1	EN0600	13HP Honda Recoil Start Engine
7	1	EN1700	13HP Honda Electric Start Engine
8	1	42115-01	Operator's Platform
9	1	42106-03	Poly Bucket – MB16
10	1	42105-01	Steel Bucket – MB16
12	1	EM0100	Stop Switch
13	1	42124-01	18HP Honda Electric Start Engine – MB21
14	1	42122-01	Poly Bucket – MB21
15	1	42123-10	Fuel Tank – MB21 (not illustrated)
16	1	42123-18	Fuel Cap – MB21 (not illustrated)

DECALS FOR MB-16 / MB-21

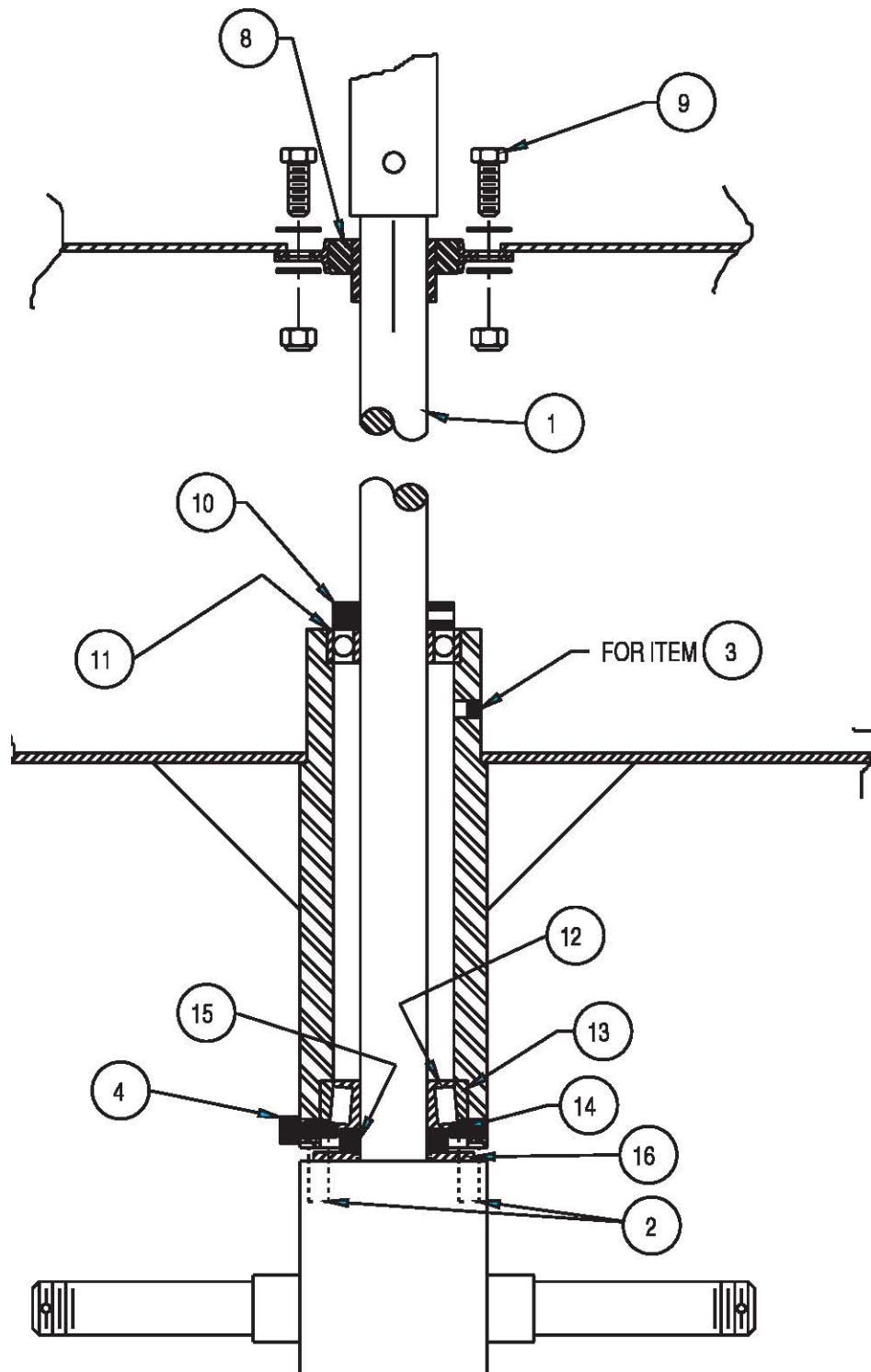


ITEM	QTY	PART#	DESCRIPTION
		42109	Complete Decal Set Includes all of the following
1	1	42109-01	Dash Decal
9	2	42109-09	MB-16 Decal for Console
10	2	42109-10	MB-21 Decal for Console
	1	42109-11	Flammable Fuel Safety Decal for MB21
*12	1	42109-12	Mine-X Purifier/Muffler Safety Decal
*13	1	42109-13	ASME Safety Decal (located on forward right hand edge of base plate)
14	1	42109-14	Fan Caution (located on rear right hand edge of base plate)
17	1	42109-17	Console Safety Decal
24	1	42109-24	Lifting/Tie Down Safety Decal (located above Operator Platform)
31	1	DE1100	Safety & Operating Instructions Decal (for Bucket only)
32	2	DE1400	Miller Scoot-Crete Decal for Console
33	2	DE1500	Scoot-Crete Decal for Steel Bucket
34	1	DE1700	Exhaust Gas (located on outer left hand corner of base plate)
35	1	DE1800	Lifting/Tie Down Safety Decal (for Bucket only)
36	1	DE1900	Hydraulic Oil Decal (for machines with top louvered cover only)
37	2	DE2000	Pinch Point Safety Decal

*MB-16 ONLY / **MB-21 ONLY

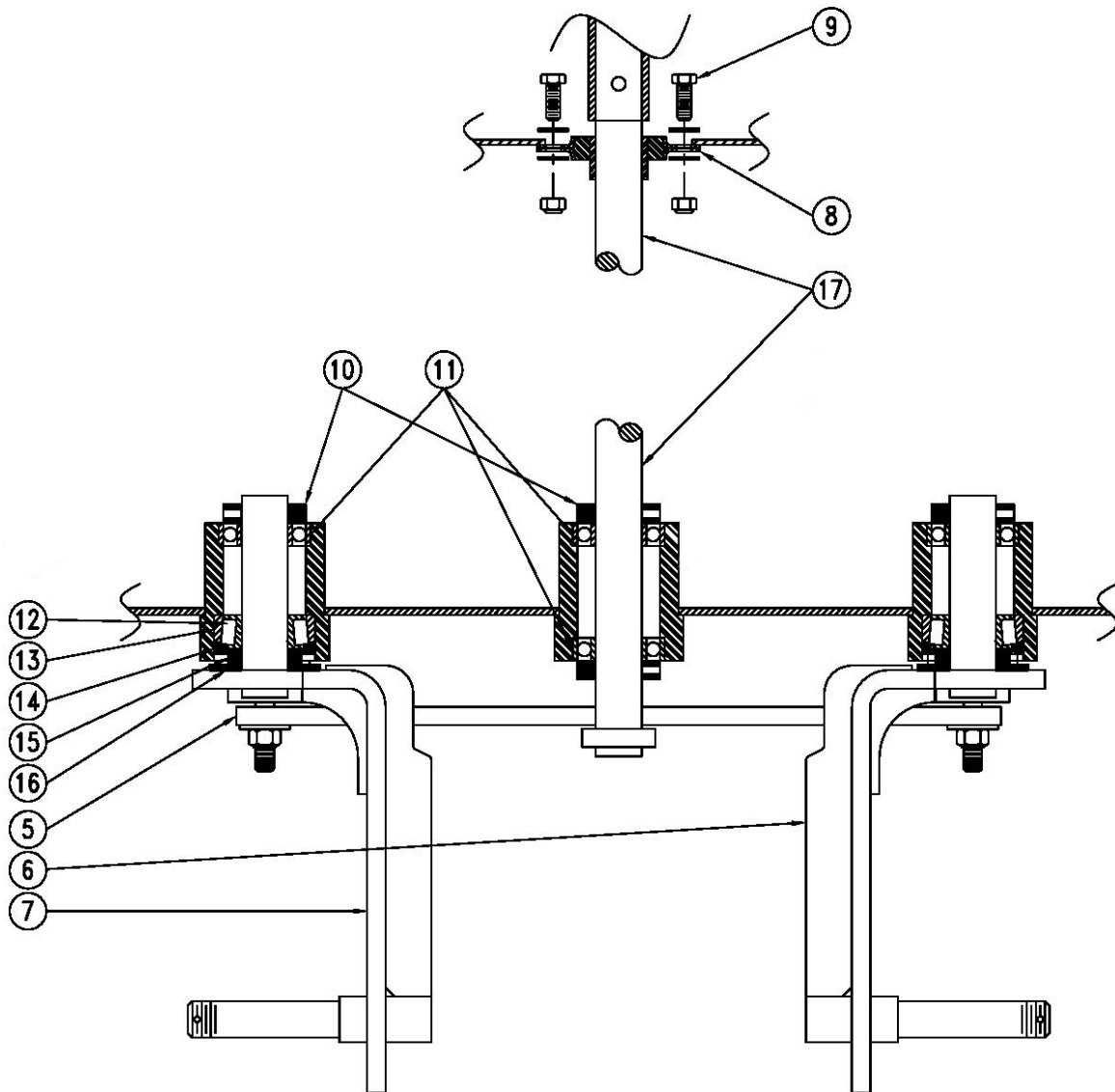
STEERING COLUMN FOR MB16 AND MB21

Refer to page 5 for parts listing



STEERING COLUMN FOR MTB16 HALFTRACK

Refer to page 5 for parts listing



STEERING COLUMN PARTS LISTING

ITEM	QTY	PART#	DESCRIPTION
1	1	32100-01	Steering Column
2	2	42131-16	Wheel Bearing Tube
3	1	HW0001	Grease Fitting 42100-18
4	2	HW0001	Cap Screw 42100-17
5	1	42132-11	Tie bar
6	1	42132-02	Left Wheel Fork
7	1	42132-03	Right Wheel Fork
8	1	32100-08	Flanged Bearing
9	2	HW0001	Bolt Assy. 32100-09
10	1	CO0100	Clamping Collar
11	1	BE1400	Ball Bearing
12	1	BE1200	Bearing Cone
13	1	BE1300	Bearing Cup
14	1	MS3700	Grease Seal
15	1	32100-15	Spacer , Steering Column
16	1	HW0001	Flat Washer 32100-16

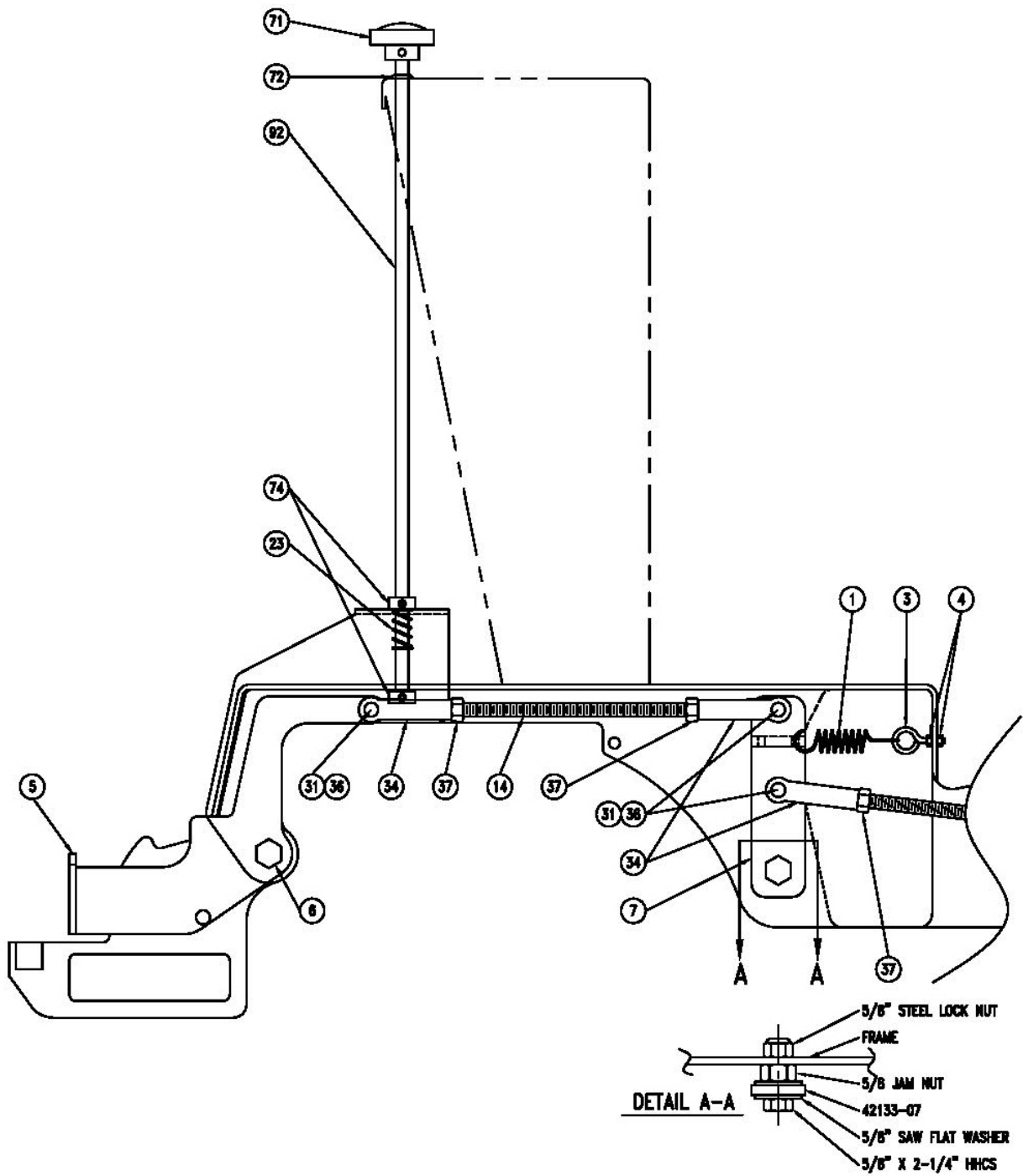
Refer to page 10 for parts listing

Refer to page 10 for parts listing

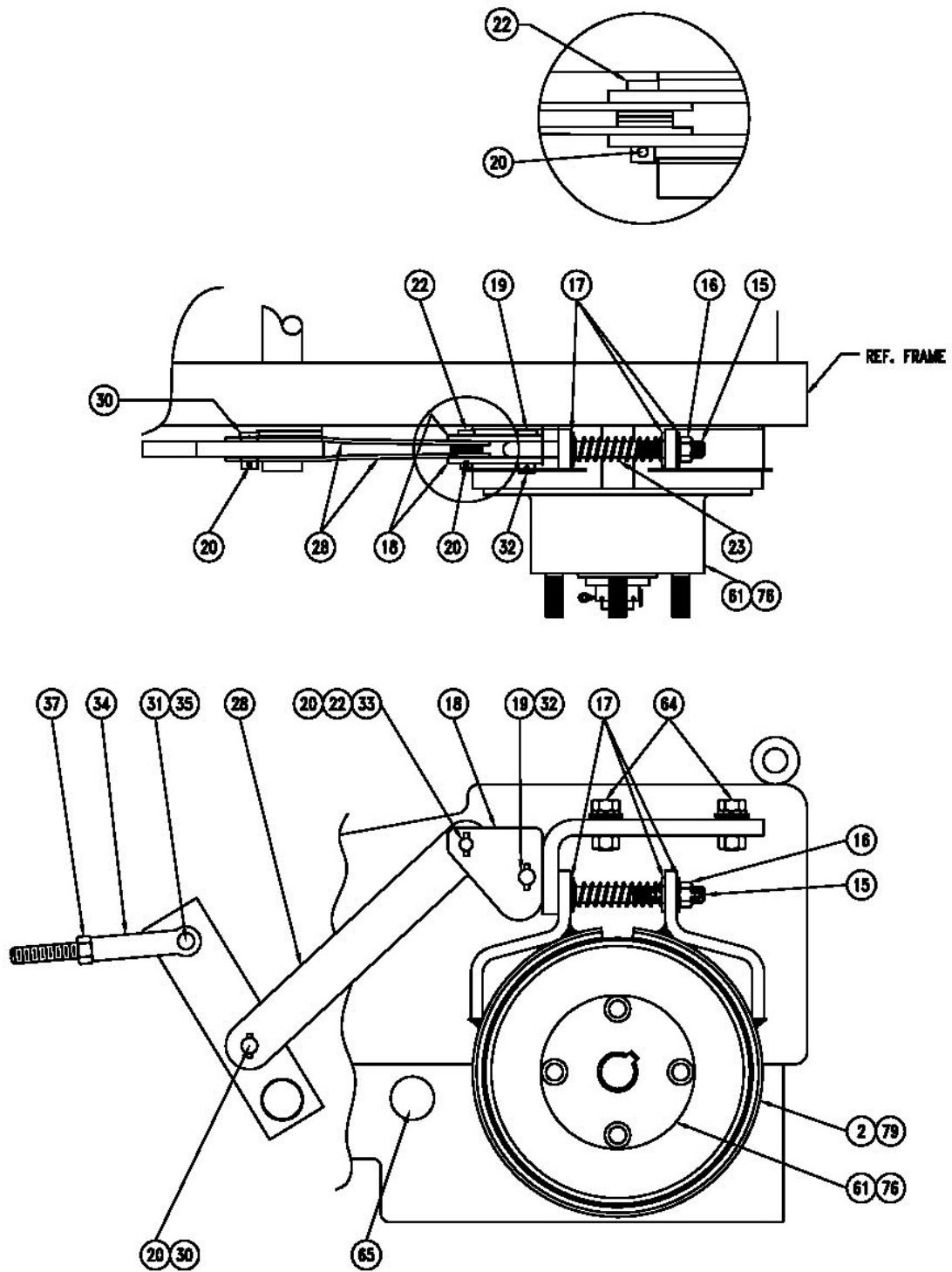


MTB16 HALFTRACK BRAKE SYSTEM

Refer to page 10 for parts listing



MB16, MB21, AND MTB16 BRAKE HUB ASSEMBLY

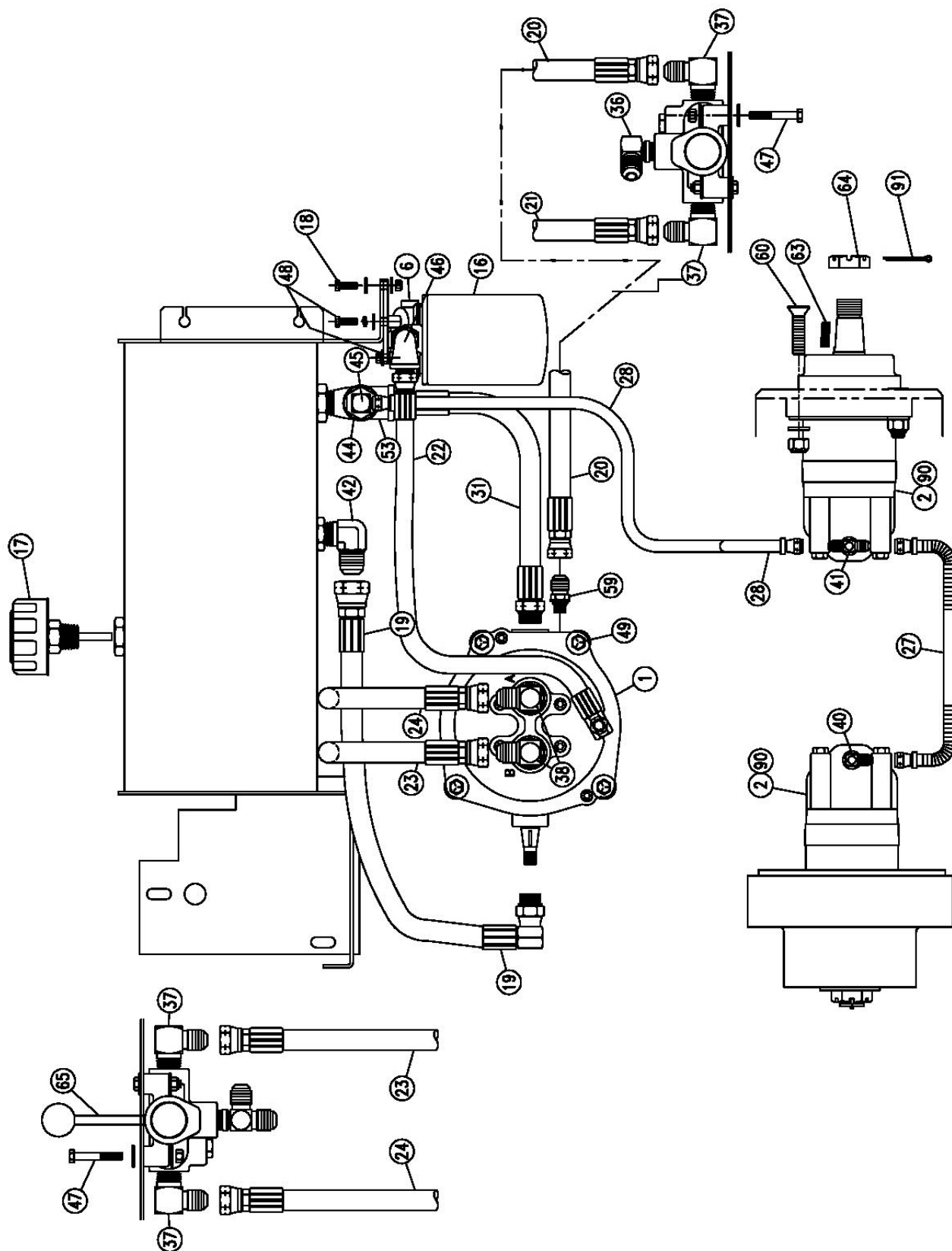


BRAKE SYSTEM PARTS LISTING

ITEM	QTY	PART#	DESCRIPTION
1	1	SN0100	Stainless Steel Extension Spring
2	2	42101-02	Brake Band
3	1	42133-18	Bent Eye Bolt
4	2	HW0001	1/4" NC Plated Hex Nut
5	1	42133-02	Brake Pedal Weldment
6	1	42133-06	5/8" HHCS x 8" Long with 2 5/8" SAE Flat Washers
7	1	42133-07	Brake Arm
14	1	42133-14	1/2" NC All Thread x 11" Long, SAE Grade Two Minimum
15	2	42101-15	"J" Bolt
16	2	42101-16	Locknut
17	2	HW0001	1/2" SAE Flatwasher 42101-17
18	4	42101-18	Brake Cam (replace in matched pairs only)
19	2	42101-19	Case Hardened Clevis Pin No Substitutes
20	4	42101-20	Spring Pin No Substitutes. - Do not use cotter pin
22	2	42101-22	Clevis Pin
23	3	SN0150	Compression Spring
28	2	42101-28	Brake Cam Link Arm
30	2	42101-30	Clevis Pin
31	4	HW0001	1/8" x 3/4" Cotter Pin 42101-31
32	2	42101-32	Spring Pin No Substitutes. Do not use cotter pin.
33	6	HW0001	5/16" USS Flatwasher 42101-33
34	2	MS3900	Adjustable Yoke End
35	2	MS3800	Yoke Pin
37	2	HW0001	1/2" NC Hex Nut 42101-37
38	1	42101-38	Brake Rod (All thread SAE grade 2 minimum) No substitutes
44	1	42101-44	Brake Pedal
46	1	HW0001	Bolt Assembly 42101-46 (3/8" x 1 1/2" HHCS with USS FW, Locknut, and Hexnut)
47	1	HW0001	Bolt Assembly 42101-47 (5/8" x 2 1/2" HHCS with 3/4" HN, LN, 5/8" Jamnut and two 5/8" SAE FW
48	1	42101-48	Spring, Brake Pedal Return
49	1	HW0001	Bolt Assembly 42101-49 (1/2" x 1 1/2" HHCS with Locknut and Nexnut)
61	2	42101-61	Wheel Hub With Studs
64	4	HW0001	Bolt Assembly 42101-64 (1/2" x 1 1/4" HHCS with SAE FW and Lockwasher)
65	4	HW0001	Bolt Assembly 42101-65 (1/2" x 1 1/4" HHCS with 2 USS FW and Locknut)
66	1	42101-66	Left Hand Brake Cover (not shown)
70	1	42101-70	Right Hand Brake Cover (not shown)
71	1	42101-71	Palm Grip
72	1	42101-72	Bushing
73	1	42101-73	Parking Brake Catch Rod
74	2	42101-74	Set Collar
92	1	42101-92	1/2" 1018 CRR x 23-7/16" Long

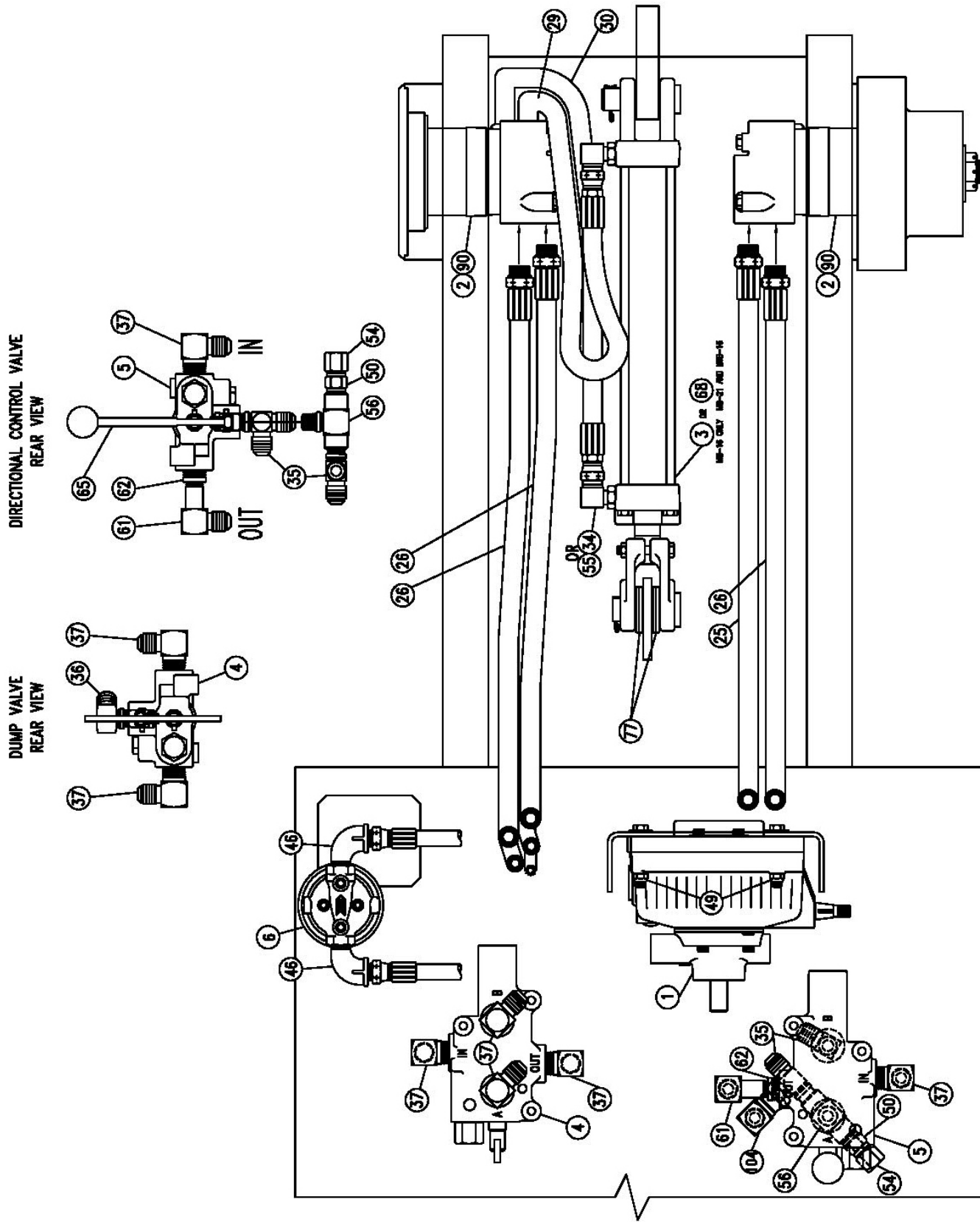
HYDRAULIC SYSTEM GENERAL ARRANGEMENT (1 OF 3)

refer to pages 14 & 15 for parts listing



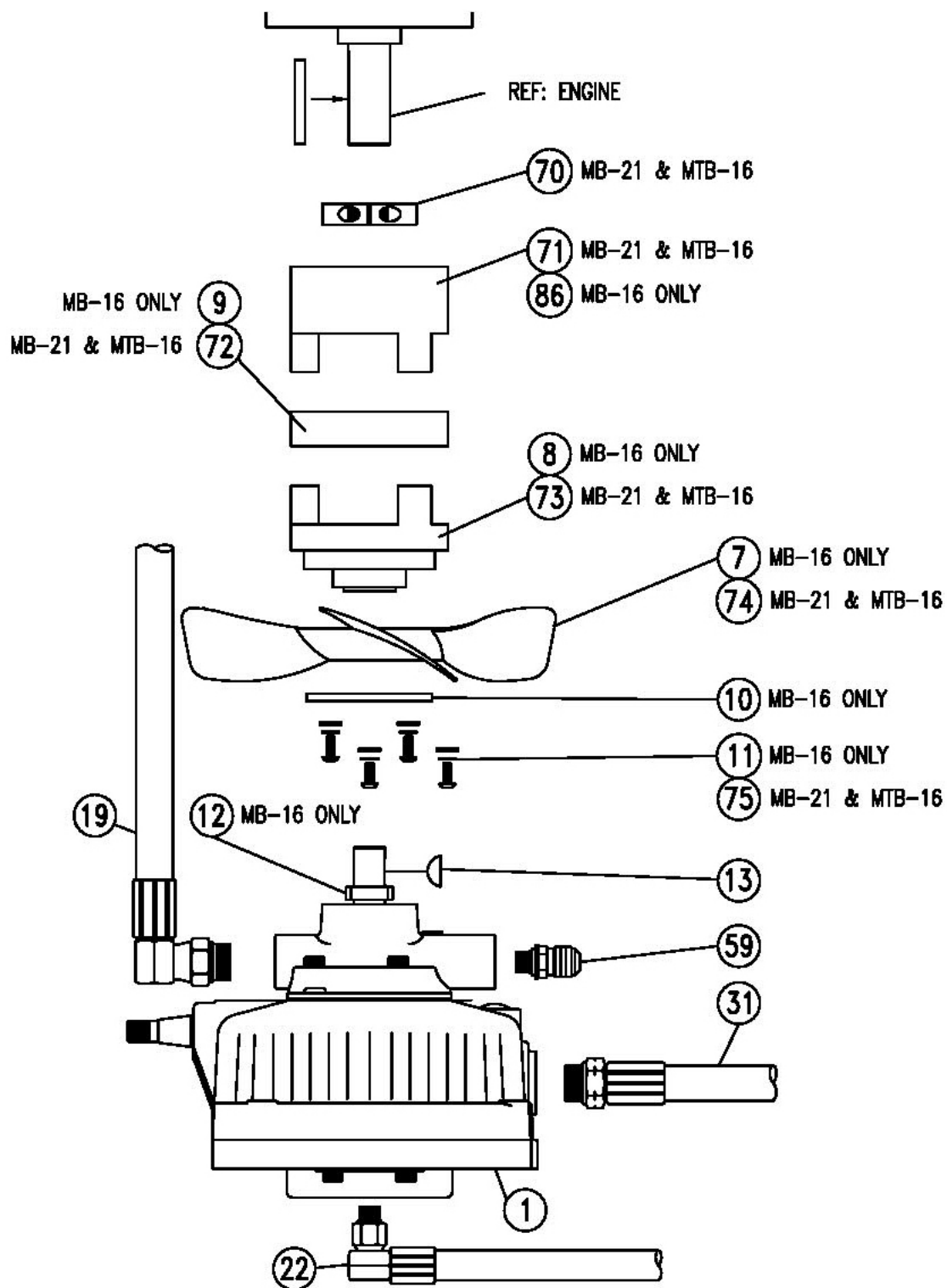
HYDRAULIC SYSTEM GENERAL ARRANGEMENT (2 OF 3)

refer to pages 14 & 15 for parts listing



HYDRAULIC SYSTEM GENERAL ARRANGEMENT (3 OF 3)

refer to pages 14 & 15 for parts listing



HYDRAULIC SYSTEM PARTS LISTING

ITEM	QTY	PART #	DESCRIPTION
1	1	HM0500	Hydrostatic Pump
2	2	HM0600	Wheel Motor
*3	1	HM0700	Hydraulic Cylinder MB-16
4	1	HM0800	Dump Valve
	1	42103-69	Dump Valve Assembly (consist of 4, 36, 37)
5	1	HM0900	Directional Control Valve
	1	42103-76	Directional Valve Assembly (consist of 5, 37, 35, 56, 50, 54)
6	1	FI0200	Spin-on Filter Assy. Complete
*7	1	42103-07	Transmission Fan
*8	1	42103-08	Pump Side Coupling Half MB-16
*9	1	PM0150	Spider Jaw Element MB-16
*10	1	42103-10	Flat washer MB –16
*11	3	HW0001	Bolt Assembly 42103-11 for MB-16 ($\frac{1}{4}$ " x $\frac{3}{4}$ " with Lock washer)
*12	2	FG3400	Shaft Spacer 42103-12 for MB-16
13	1	HW0001	Woodruff Key 42103-13 ($\frac{3}{16}$ " wide x $\frac{3}{4}$ " long)
16	1	42103-16	Spin-on Filter Element
17	1	FI0350	Reservoir Filler Breather Ass'y
18	1	HW0001	Bolt Assembly 42103-18 ($\frac{1}{4}$ " x $\frac{3}{4}$ " HHCS with 2 SAE FW and Lock nut)
19	1	42103-19	Hose Assembly, 15" long
20	1	HH1700	Hose Assembly, 20" long
21	1	42103-21	Hose Assembly, 24" long
22	1	42103-22	Hose Assembly, 18" long
23	1	HH1900	Hose Assembly, 27" long
24	1	HH2000	Hose Assembly, 30" long
25	2	42103-25	Hose Assembly, 69" long
26	2	42103-26	Hose Assembly, 65" long
27	1	HH2100	Hose Assembly, 18" long w/spring guard
28	1	HH2200	Hose Assembly, 54" long w/spring guard
29	1	HH2300	Hose Assembly, 72" long w/spring guard
30	1	HH2400	Hose Assembly, 66" long w/spring guard
31	1	HH2500	Hose Assembly, 18" long
35	2	FG3800	Fitting Male Run Tee
36	2	FG3900	90° Male Elbow
37	4	FG3700	90° Male Elbow
38	2	FG4000	Straight Thread "O" Ring Elbow
40	1	FG4100	Straight Thread "O" Ring 90° Elbow
41	1	FG4200	Straight Thread "O" Ring Branch Tee
42	1	42103-42	90° Male Elbow
44	1	42103-44	Hex Reducer Bushing Reservoir

HYDRAULIC SYSTEM PARTS LISTING (continued)

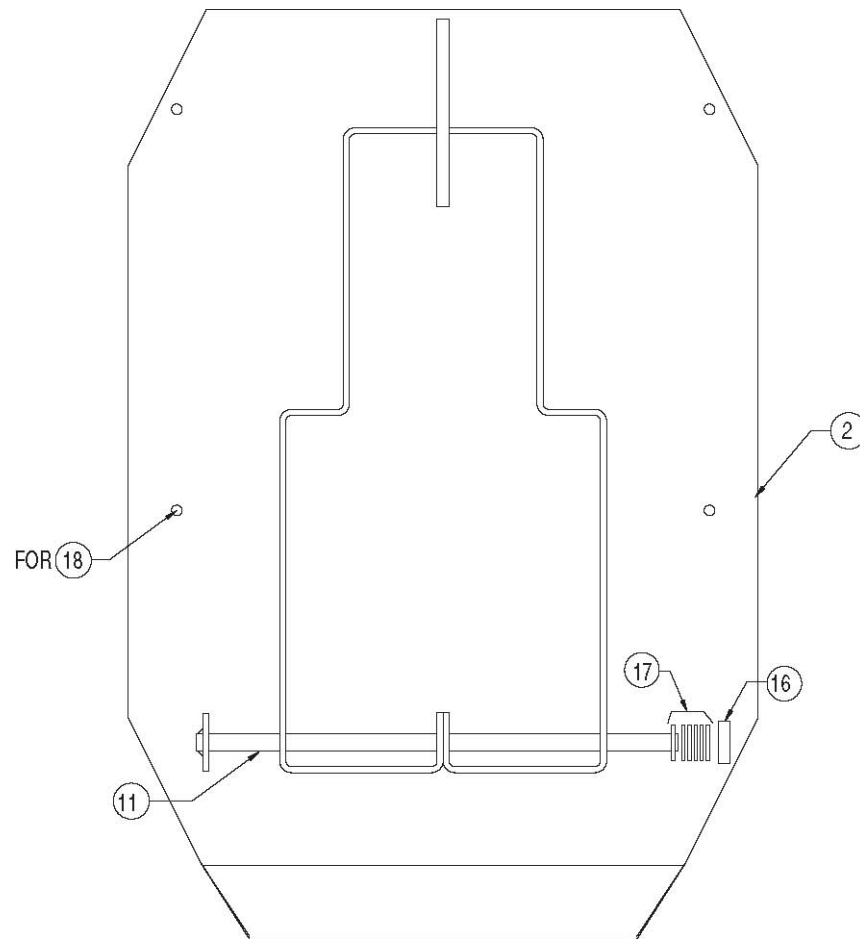
ITEM	QTY	PART#	DESCRIPTION
45	1	FG4300	90° Male Elbow
46	2	42103-46	90° Street Elbow
47	6	HW0001	Bolt Assembly 42103-47 ($\frac{5}{16}$ " x 1 $\frac{3}{4}$ " HHCS with USS FW and Lock nut)
48	2	HW0001	Bolt Assembly 42103-48 ($\frac{1}{4}$ " x $\frac{3}{4}$ " with Lock washer and SAE FW)
49	4	HW0001	Bolt Assembly 42103-49 ($\frac{3}{8}$ " x 2 $\frac{1}{2}$ " with USS FW and NyLock nut)
50	1	42103-50	Straight Male Connector
53	1	42103-53	Fitting Male Run Street Tee
54	1	42103-54	Cap
55	2	FG3600	90° "O" Ring Elbow
56	1	42103-56	Male Branch Tee
59	1	42103-59	Straight Thread "O" Ring Connector
60	8	HW0001	Bolt Assembly 42103-60 ($\frac{1}{2}$ " x 2" HSFHCS with split lock and NyLock)
63	1	42103-63	Wheel Motor Key
64	1	42103-64	Wheel Motor Castle Nut
65	1	42103-65	Valve Handle Weldment
**68	1	42123-23	Hydraulic Cylinder MB-21
**70	1	42303-16	Clamping Collar MB-21
**71	1	42123-04	Engine Side Coupling Half MB-21
**72	1	42123-06	Spider Jaw Element MB-21
**73	1	42123-05	Pump Side Coupling Half MB-21
**74	1	42123-01	Transmission Fan MB-21
**75	4	42123-03	Bolt Assembly MB-21
77	4	HW0001	Flat Washer 42103-77 (1" SAE FW)
*86	1	PM0100	Engine Side Coupling Half MB-16
91	1	HW0001	Wheel Motor Cotter Pin

*MB-16 ONLY / **MB-21 AND MTB16 ONLY

REPLACEMENT SEAL KITS

PART#	DESCRIPTION
42103-99	MB16 Lift Cylinder Seal Kit
100135	MB21 and MTB16 Lift Cylinder Seal Kit
32016-47	MB16/21 Hydraulic Wheel Motor
42103-85	Travel Speed Control Valve and Dump Valve Seal Kit

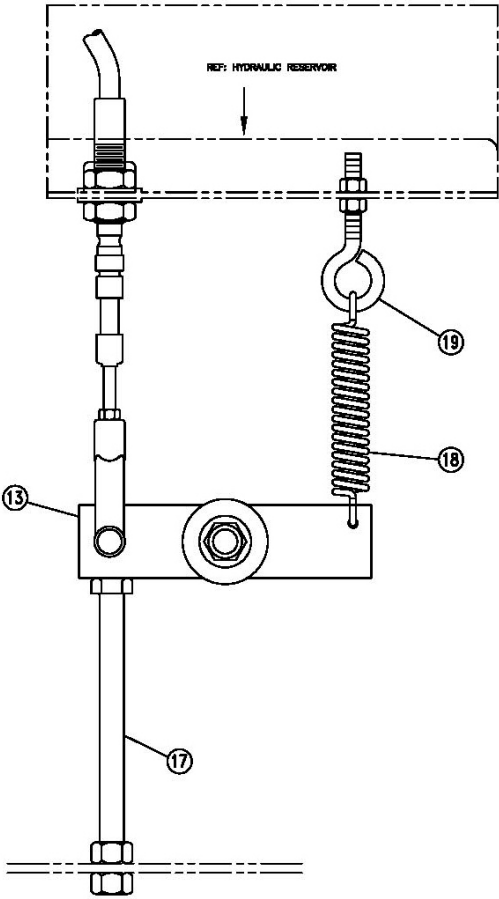
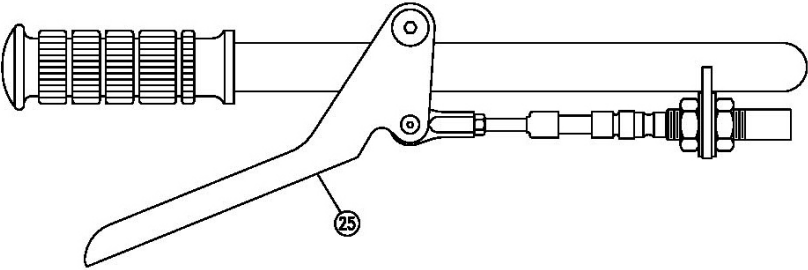
BUCKET BASE PLATE



BOTTOM VIEW

ITEM	QTY	PART#	DESCRIPTION
2	1	42110-02	Bucket Base Plate
11	1	42110-11	Pivot Pin
16	1	42110-16	Clamping Collar
17	6	HW0001	Washer Spacer 42110-17 ($\frac{3}{4}$ " SAE FW)
18	6	42106-02	Elevator Bolt Assembly

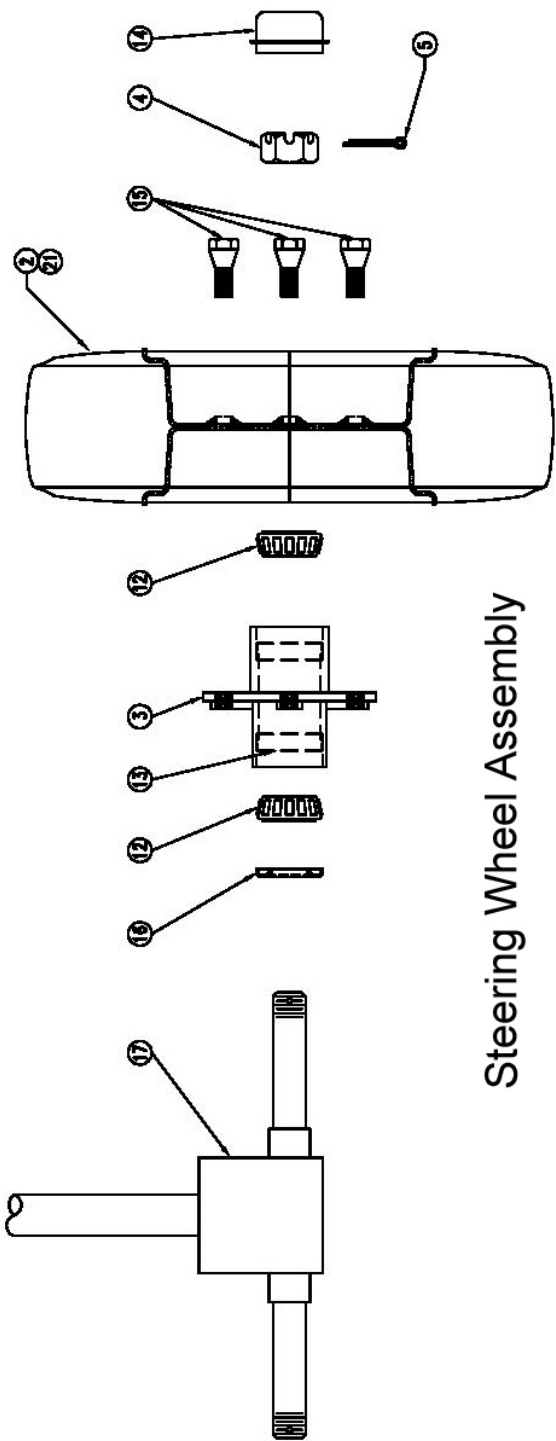
TRAVEL SPEED CONTROL ASSEMBLY



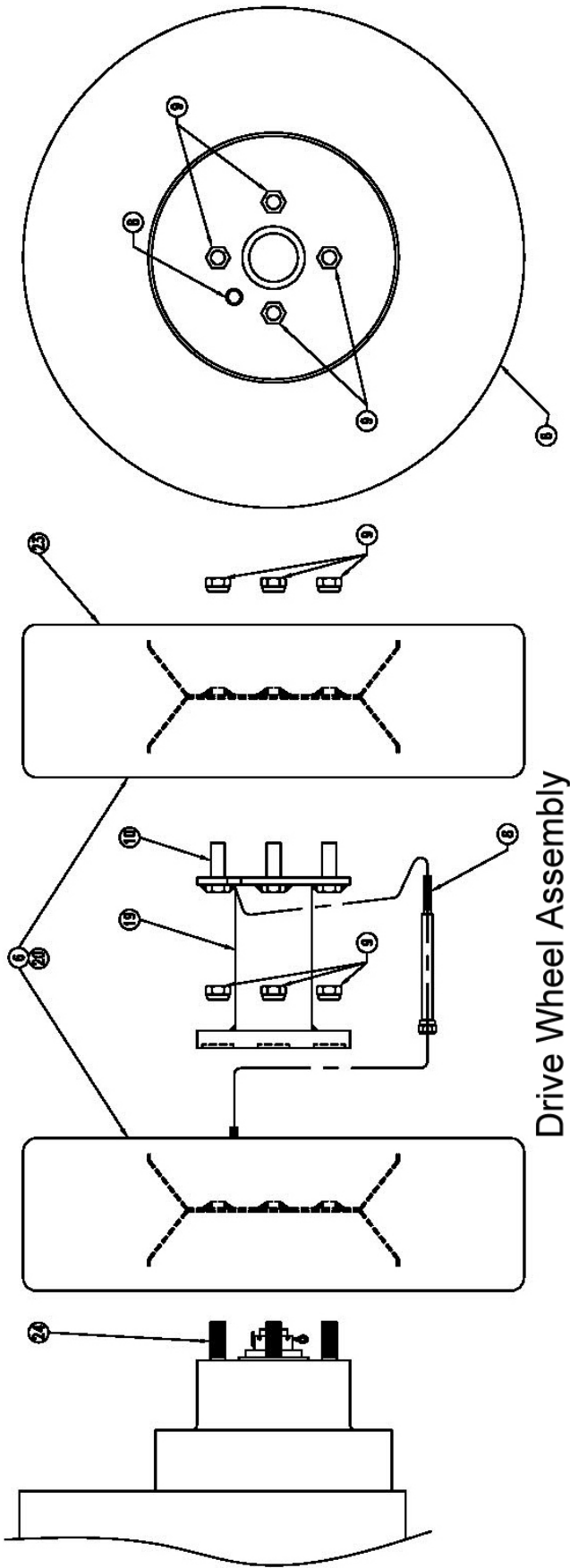
SPEED CONTROL PARTS LISTING

ITEM	QTY	PART #	DESCRIPTION
4	1	42107-04	Shoulder Bolt
9	1	CT0900	Shift Cable
10	1	MS2500	Adjustable Yoke End
11	1	42107-11	Clevis Pin
12	1	HW0001	Cotter Pin 42107-12 ($\frac{3}{32}$ " x $\frac{3}{4}$ ")
13	1	42107-13	Transmission Shift Bar
14	1	HW0001	Locknut 42107-14 ($\frac{1}{2}$ " Steel Lock Nut)
15	1	HW0001	Flatwasher 42107-15 ($\frac{5}{8}$ " USS)
16	1	HW0001	Flatwasher 42107-16 ($\frac{1}{2}$ " SAE)
17	1	42107-17	Stop Bolt With Hex Nut
18	1	SN0100	Spring
19	1	HW0001	Eye Bolt 42107-19 ($\frac{1}{4}$ " x 3")
20	2	HW0001	Hex Nut 42107-20 ($\frac{1}{4}$ ")
21	1	HW0001	Woodruff Key 42107-21 ($\frac{1}{8}$ " x $\frac{5}{8}$ " not shown)
22	2	HW0001	Flat Washer 42107-22 ($\frac{3}{8}$ " SAE)
23	1	42107-23	Tie Rod End
24	1	42107-24	Shoulder Bolt
25	1	42107-25	Travel Speed Control Lever
26	1	42100-35	Grommet (Not shown)

WHEEL ASSEMBLIES



Steering Wheel Assembly



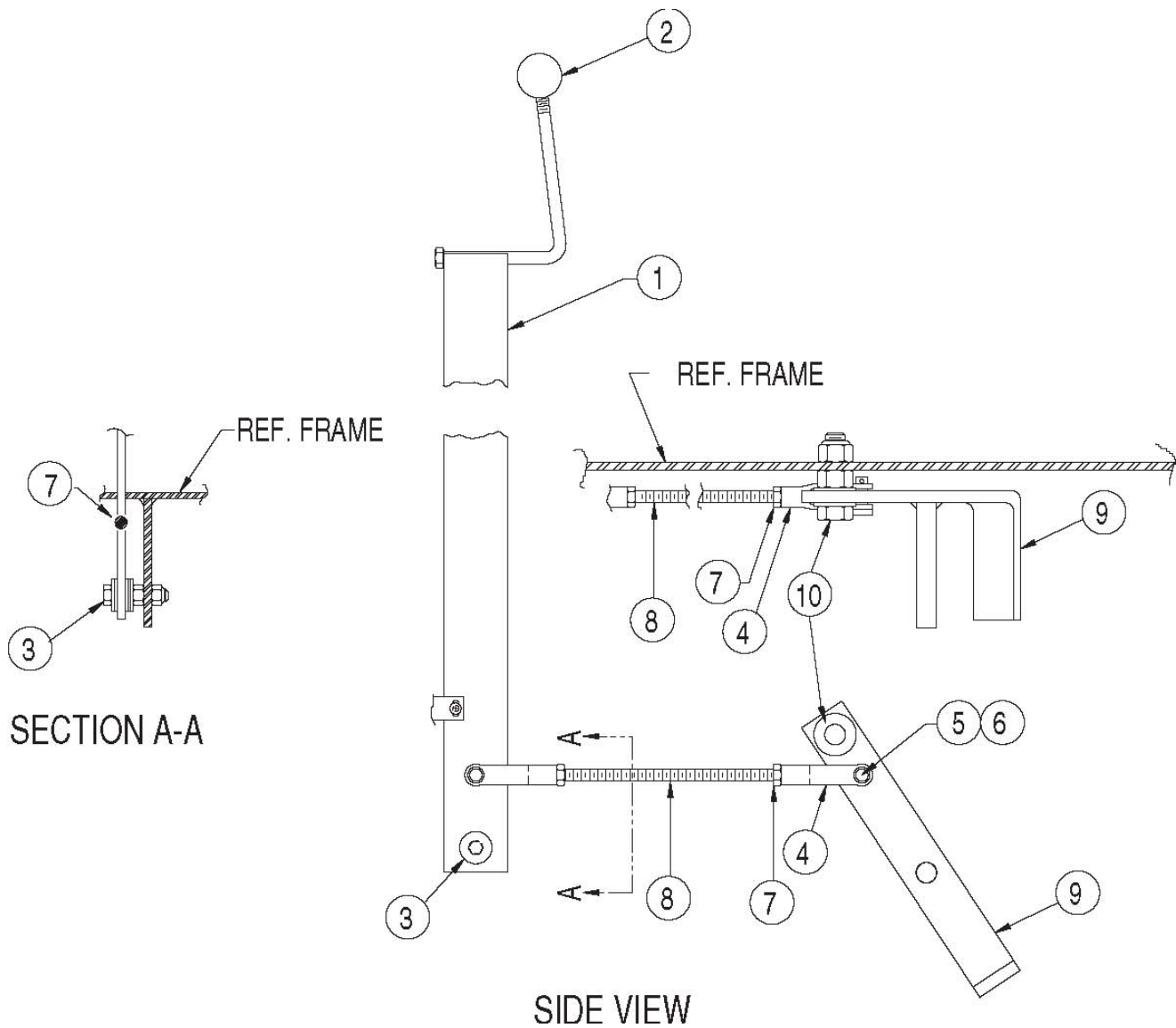
Drive Wheel Assembly

WHEEL ASSEMBLIES PARTS LISTING

ITEM	QTY	PART #	DESCRIPTION
2	2	42113-02	Steering Tire
3	2	42113-03	High Speed Hub with Bearings, Grease Seal and Grease Cap
4	2	42113-04	Castle Nut Steering
5	2	HW0001	Cotter Pin 42113-05 ($\frac{1}{8}$ " x 1 $\frac{1}{2}$ ")
6	4	42113-06	Front Drive Tire Assembly
8	2	MS4000	Air Valve Extender 42113-08
9	16	42113-09	Cone Wheel Nut
10	4	42116-05	Space Wheel Studs
12	4	42113-12	Roller Bearing
13	4	42113-13	Bearing Cup
14	2	42113-14	Grease Cap
15	8	42113-15	Wheel Bolts
16	2	42113-16	Grease Seal
17	1	32100-01	Steering Column
19	2	42116-01	Wheel Spacer
20	4	42113-20	Foam Filled Drive Tire Assembly
21	2	42113-21	Foam Filled Steering Tire Assembly
23	1	42113-23	Outside Pneumatic Tire Assembly
24	4	42101-63	Brake Hub Wheel Studs

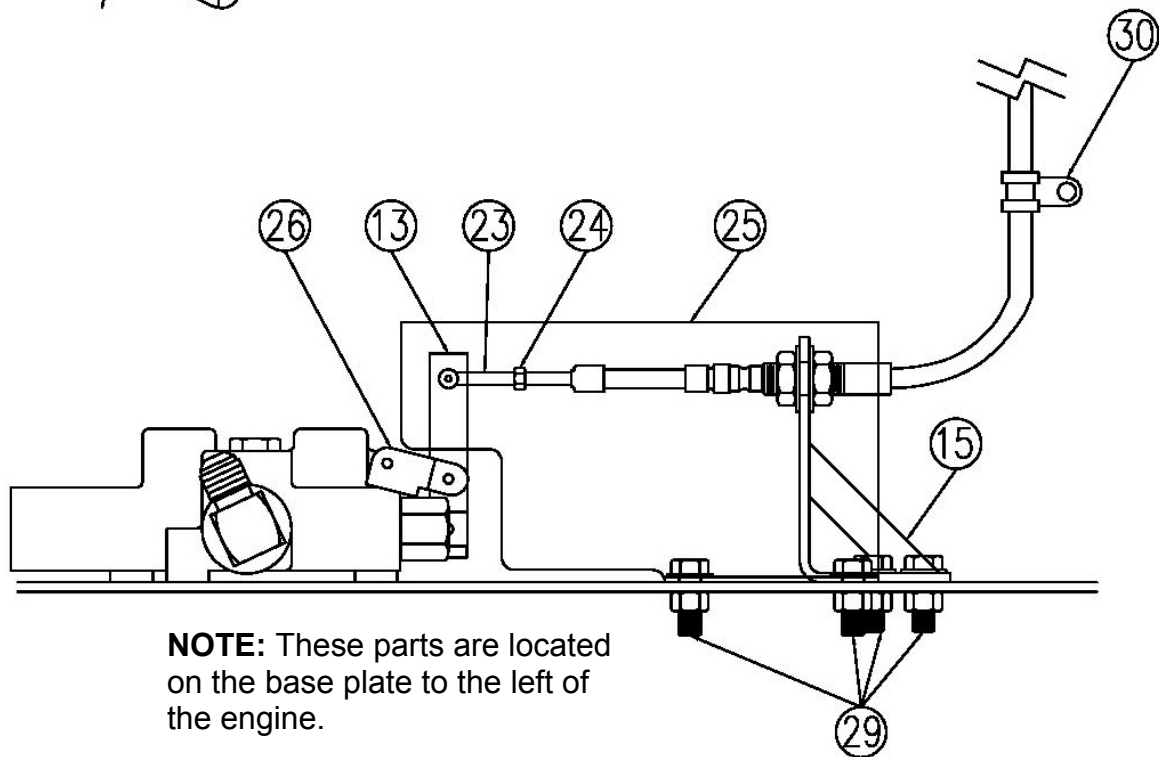
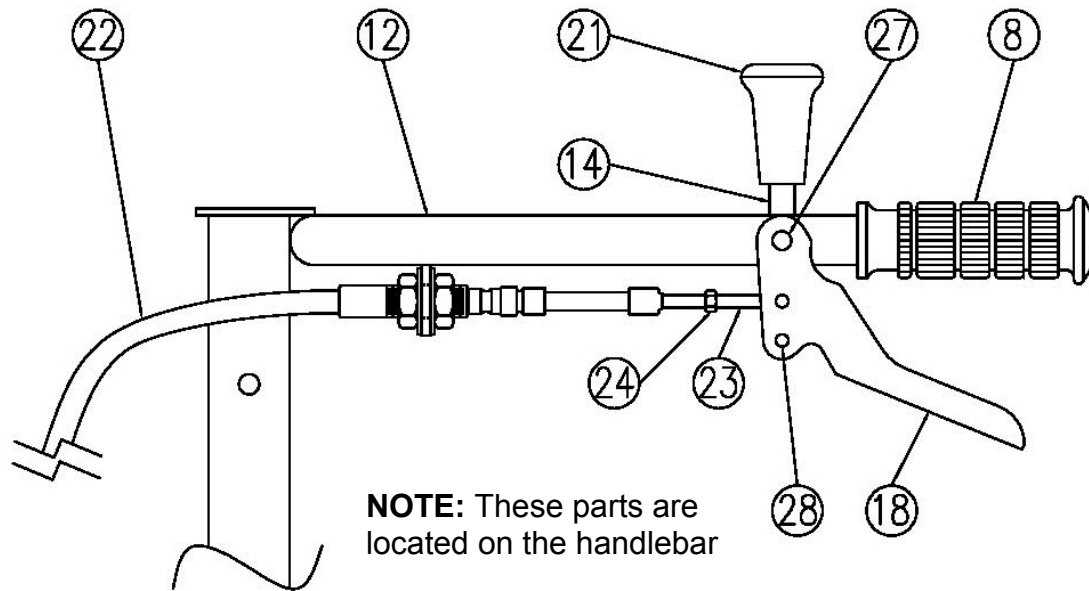
CONSOLE MOUNTED DUMP LEVER ASSEMBLY

Refer to page 23 for parts listing



HANDLE MOUNTED DUMP LEVER ASSEMBLY

refer to pages 23 for parts listing



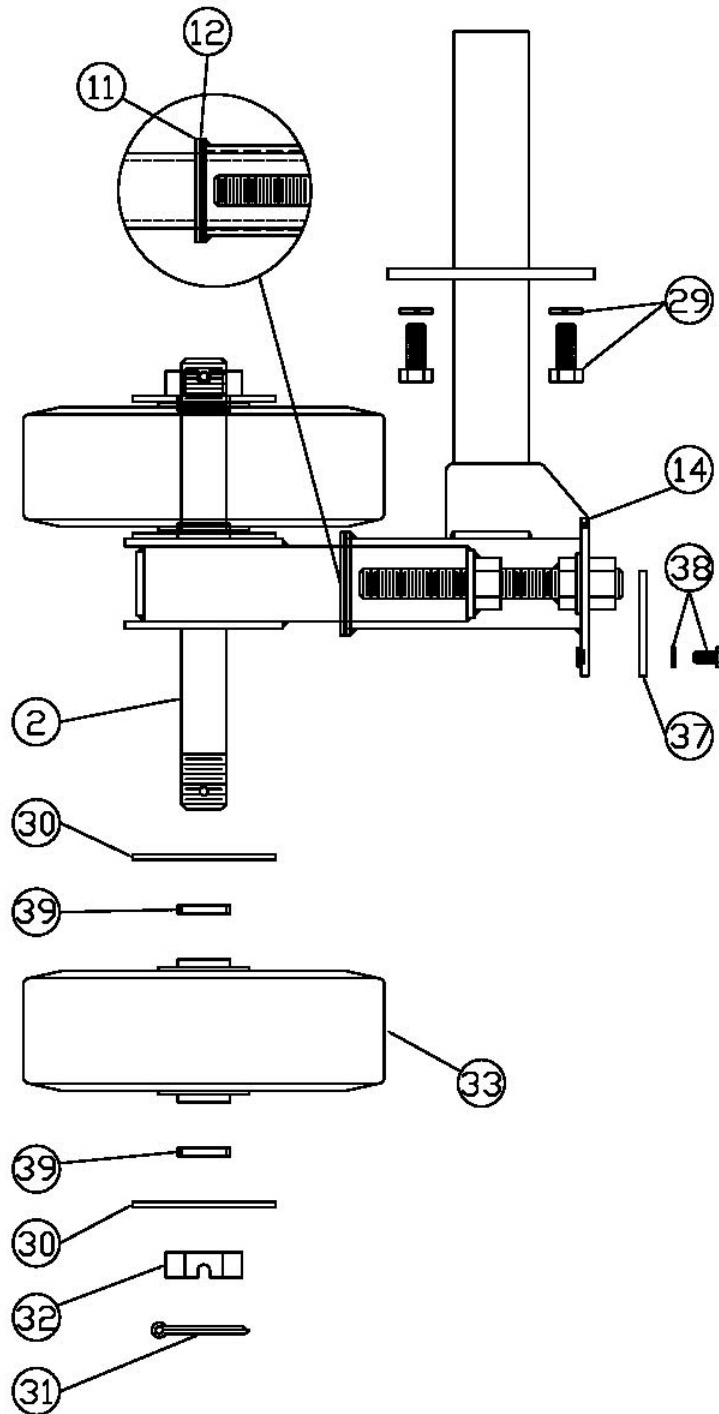
DUMP LEVER PARTS LISTING

ITEM	QTY	PART#	DESCRIPTION
1	1	42117-02	Dump Lever
2	1	MS2100	Plastic Ball Knob
3	1	HW0001	Bolt Assembly 42117-08 (3/8" X 1 3/4" HHCS with 5 USS FW, 1 Hex Nut, and 1 Lock Nut)
4	2	42117-09	Yoke
5	2	42107-11	Clevis Pin
6	2	HW0001	Cotter Pin 42117-11 (3/32" x 3/4")
7	2	HW0001	Hex Nut 42117-12
8	1	42117-13	Dump Rod
9	1	42117-17	Dump Pedal
10	1	HW0001	Bolt Assembly 42117-23 (5/8" x 2 1/4" HHCS with 2 SAE FW, 1 Hex Nut, and NyLock)
12	1	42126-12	Handlebar with Dump Control Weldment
13	1	42126-13	Valve Shift Bar
14	1	42126-14	Dump Lever
15	1	42126-15	Cable Mounting Bracket
18	1	42126-18	Dump Lever Handle
19	1	42126-08	Hand Grip
21	1	42126-21	Dump Lever Knob
22	1	42126-22	Dump Cable
23	2	42126-23	Clevis with Pin
24	2	HW0001	#10-32 UNF Plated Hex Nut (42126-24)
25	1	42126-25	Dump Cable Cover
26	1	42126-26	Valve Link Bracket Kit
27	1	HW0001	1/4" HHCS x 1 3/4" Long with 2 SAE FW / Steel Lock Nut (42126-27)
28	1	HW0001	1/4" x 1 1/4" Long Shoulder Bolt with 10-24 Nylock Locknut (42126-28)
29	5	HW0001	3/8" HHCS x 1 1/4" Long with SAE FW / Locknut (42126-29)
30	1	HW0001	3/8" ID Loom Clamp (40120-27)

MTB16 TRACK ASSEMBLY

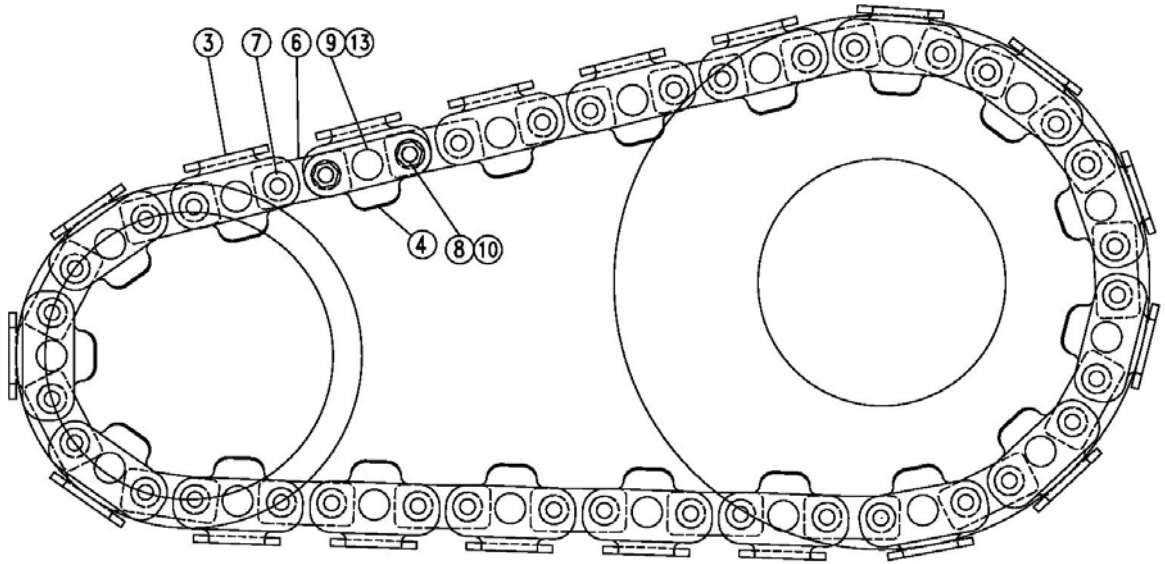
Refer to page 26 for parts listing

A. Idler Wheel Assembly

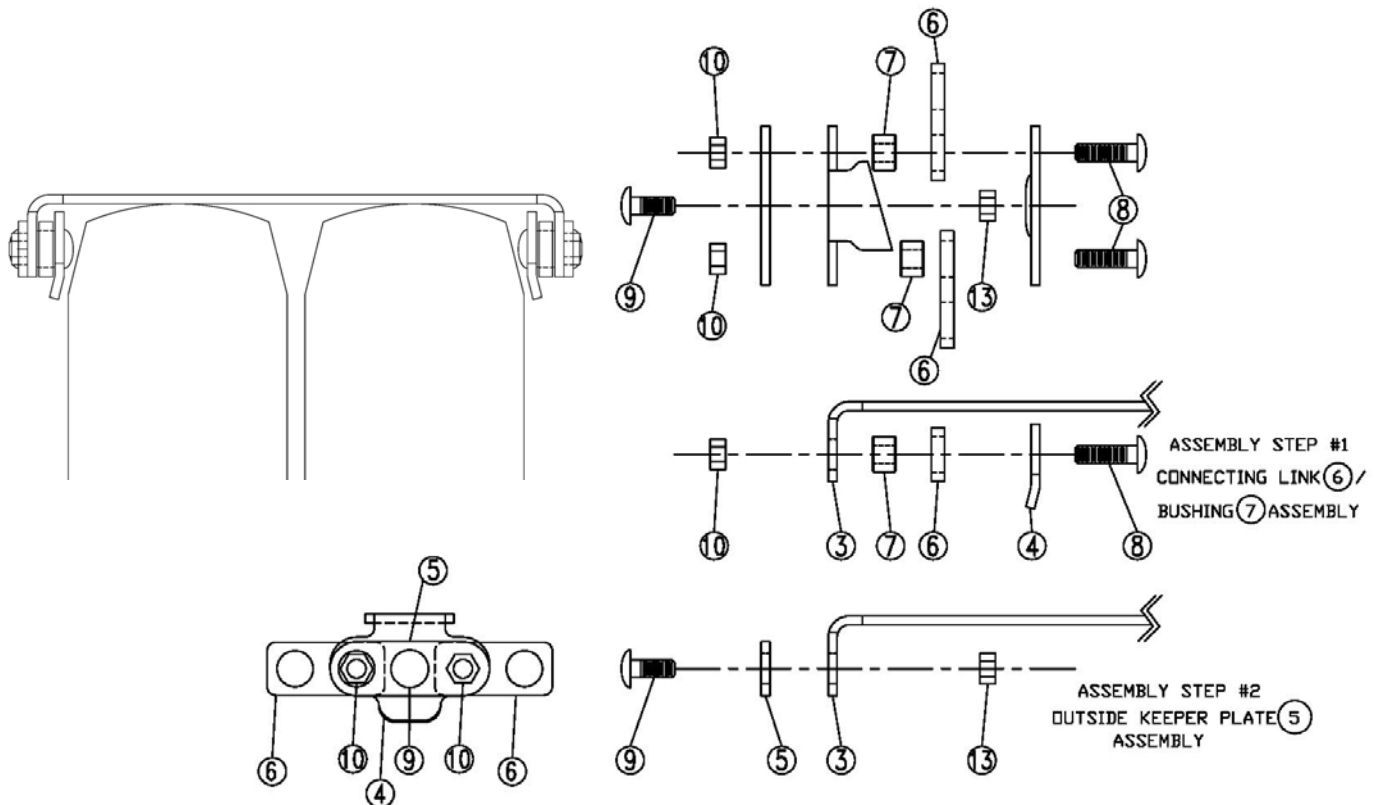


MTB16 TRACK ASSEMBLY (continued)

B. Track Assembly



C. Cleat Assembly



MTB16 TRACK ASSEMBLY PARTS LISTING

ITEM	QTY	PART#	DESCRIPTION
2	1	42130-02	Rear Axle Support Tube
3	19	42127-03	Cleat
4	28	42127-04	Backer Plate
5	38	42127-05	Outside Keeper
6	38	42127-06	Connecting Link
7	76	42127-07	Bushing
8	76	42127-08	½" – 13 NC x 1 ½" Long Plated Carriage Bolt. Grade 5 Minimum.
9	38	42127-09	½" – 13 NC x 1" Long Plated Carriage Bolt. Grade 5 Minimum.
10	76	42127-10	½" 1 13 NC Plated Hex Nut. Grade 8 Minimum
11	1	42130-11	Seal Retaining Flange
12	1	42130-12	Rubber Seal
13	38	HW0001	½" NC Steel Lock Nut (42127-13)
14	1	42130-14	Adjusting Tube Weldment
29	2	42130-29	5/8" – 11 NC HHCS x 1 ½" Long with Split Steel Lock Washer
30	4	42130-30	Wheel Seal Cover
31	2	HW0001	¼" x 2 ½" Cotter Pin (42130-31)
32	2	42130-32	1 ½" – 6 NC x 27/32" Cad Plated
33	2	42130-33	Idler Wheel
37	1	42130-37	Tensioning Nut Keeper Plate
38	1	42130-38	3/8" – 18 NC HHCS x ¾" Long with Split Steel Lock Washer
39	2	42130-39	Wheel Spacer