



PARTS MANUAL

1548 Haul Unit System

Haul Unit S/N: F21700F

Publication No. 050069A

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Akkerman Inc. 58256 266th Street Brownsdale, MN 55918
Phone: 507-567-2261 Fax: 507-567-2605 email: akk@akkerman.com

SERVICE • RELIABILITY • INNOVATION

Introduction

This parts manual contains assembly illustrations of the Akkerman 1548 Haul Unit System. The illustrations in this manual are intended to show typical construction of various parts. In some instances, the details of parts illustrated may not exactly represent their actual appearance, but will help to identify parts performing the same functions. Additional copies of this manual may be purchased from the Akkerman Aftermarket Support Department, or downloaded from the Akkerman web site at www.akkerman.com.

The 1548 Haul Unit System transports the spoils from the Tunnel Boring Machine back to the launch shaft. The typical Akkerman system is comprised of a haul unit, track and dirt bucket. Multiple-bucket train systems (utilizing the haul cart) are available to increase productivity on long tunnels or pushes. The 1548 haul unit is electrically powered with a removable battery pack, and equipped with hydraulic disc brakes. Dirt buckets are designed for maximum capacity based on the size of pipe or tunnel being installed. They are self-dumping when using a two-line crane or by attaching a stationary line. The track sections are lightweight, yet sturdy. The tracks are quick to connect with a single bolt and wing nut. Storage racks are available for convenient shipping and handling.

LOCATING PARTS

This parts manual is organized into 13 sections to help you locate parts information quickly. The first page of each section lists the assemblies within the section.

An Alphabetical Index, Section 12, is provided to help you find the page number of a specific assembly. If the part number is known, the Numerical Index, Section 13, can also be utilized to find the page number of the assembly.

USE GENUINE AKKERMAN PARTS

The use of parts other than genuine Akkerman parts could affect the efficient performance of the Haul Unit. **ALWAYS** use genuine Akkerman parts.

PARTS ORDERING

To order fast, accurate, and reliable parts service, call (800) 533-0386, (507) 567-2261, or fax (507) 567-2605, and provide the following information.

1. Model Number
2. Serial Number
3. Part Number, Description, and Quantity
4. Shipping Preference

MEASUREMENTS

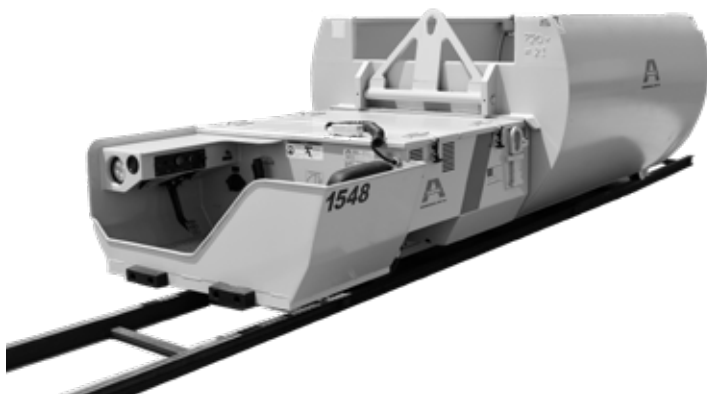
The unit of measure in this manual is in inches unless indicated otherwise.

HARDWARE SPECIFICATION

All Akkerman products are assembled with SAE Grade 8 bolts, nuts, and washers. **ALWAYS** use matched fastener hardware when replacing or repairing the unit.

If you find any errors in this manual or have suggestions for improvement, please let us know. Email your comments via the Akkerman web site (Contact Us web page), or mail your suggestions to: Akkerman Inc., ATTN: Technical Publications, 58256 266th Street, Brownsdale, MN.

Akkerman Inc. reserves the right to improve its product without notice or obligation.



1548 Haul Unit with 720 Dirt Bucket

NOTES



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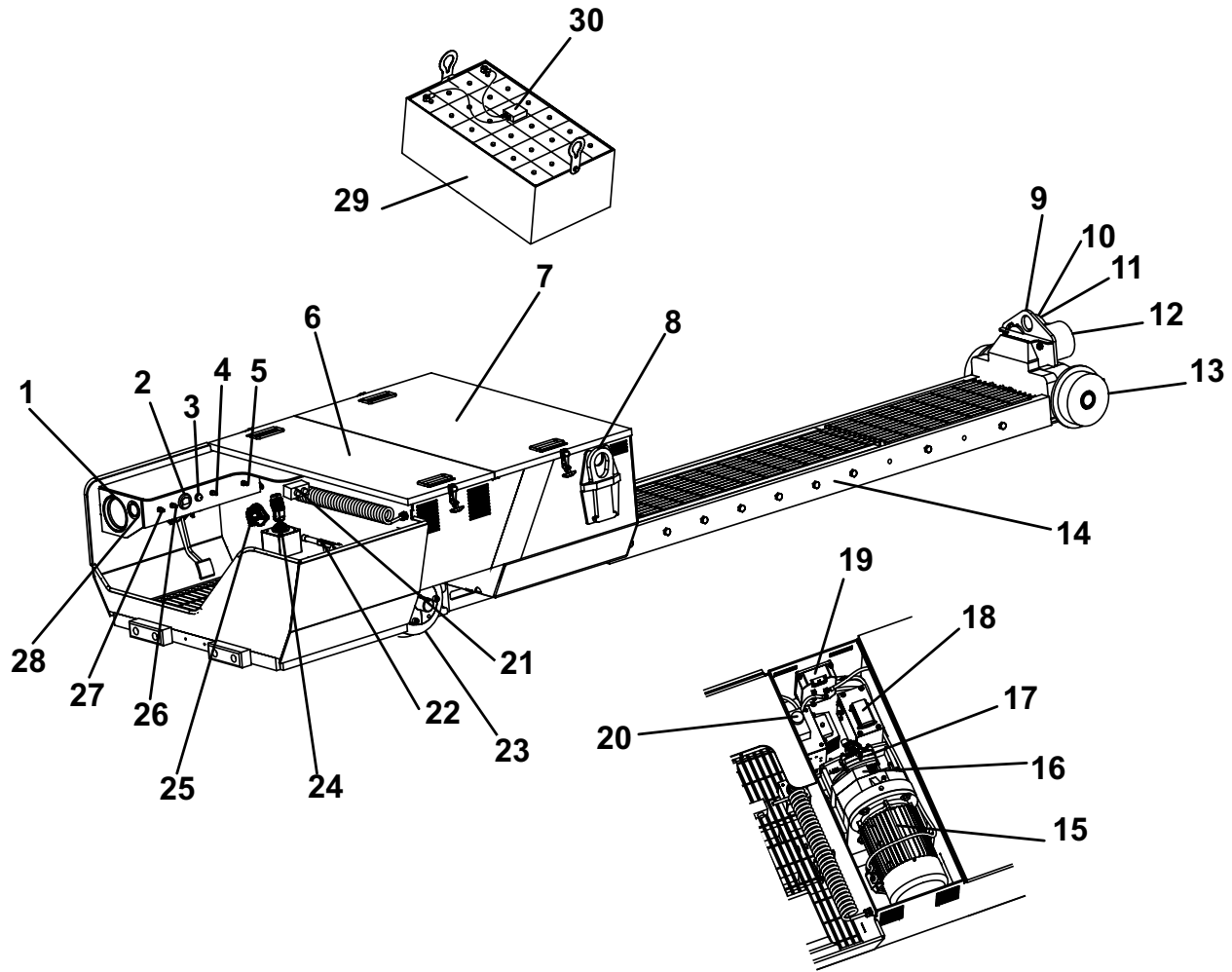
NOTES



General Information

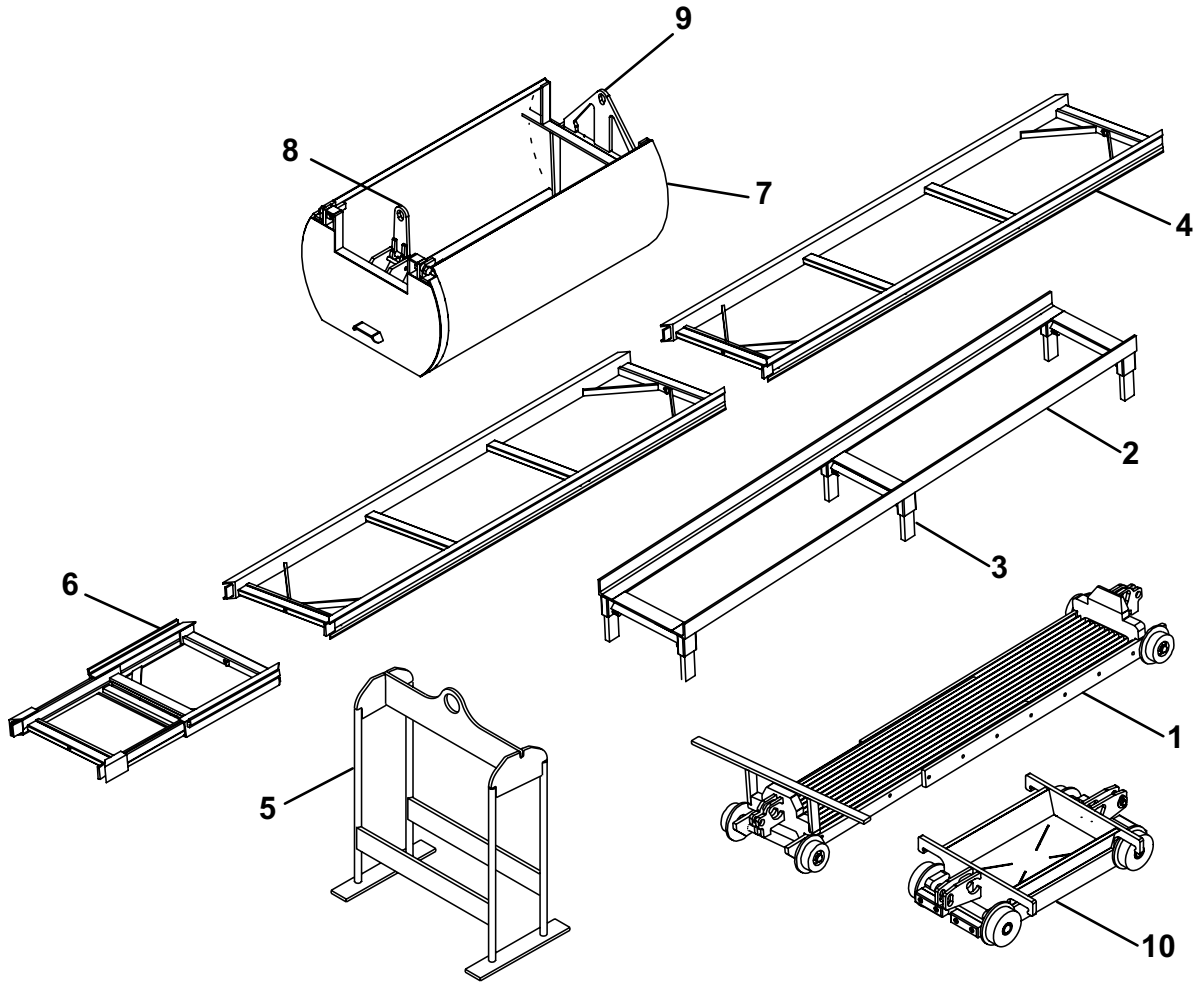
Terminology	
1548 Haul Unit	2
Dirt Bucket, Track & Inspection Cart	3

TERMINOLOGY - 1548 HAUL UNIT



- | | | |
|--------------------------------|--------------------------------|-----------------------------|
| 1. Front Light | 11. Rear Beacon Light | 21. Inching Control |
| 2. Battery Gauge | 12. Rear Light | 22. Parking Brake |
| 3. Horn | 13. Idler Wheel | 23. Drive Wheel |
| 4. Propulsion Selector Control | 14. Frame Assembly | 24. Direction/Speed Control |
| 5. Motor Control Switch | 15. 15 HP Electric Drive Motor | 25. Main Power Switch |
| 6. Drive Box Compartment | 16. Gear Box | 26. Rear Light Switch |
| 7. Battery Compartment | 17. Brake Assembly | 27. Front Light Switch |
| 8. Lift Eye | 18. Fuse Block | 28. Front Beacon Light |
| 9. Idler Assembly | 19. Motor Controller | 29. Battery Pack |
| 10. Horn Assembly | 20. Hydraulic Brake Reservoir | 30. Battery Harness |

TERMINOLOGY - DIRT BUCKET, TRACK & INSPECTION CART



- | | |
|--------------------|---------------------|
| 1. Haul Cart | 6. Sliding Track |
| 2. Track Riser | 7. Dirt Bucket |
| 3. Track Riser Bar | 8. Bucket Lift Eye |
| 4. Track | 9. Door Lift Eye |
| 5. Track Carrier | 10. Inspection Cart |

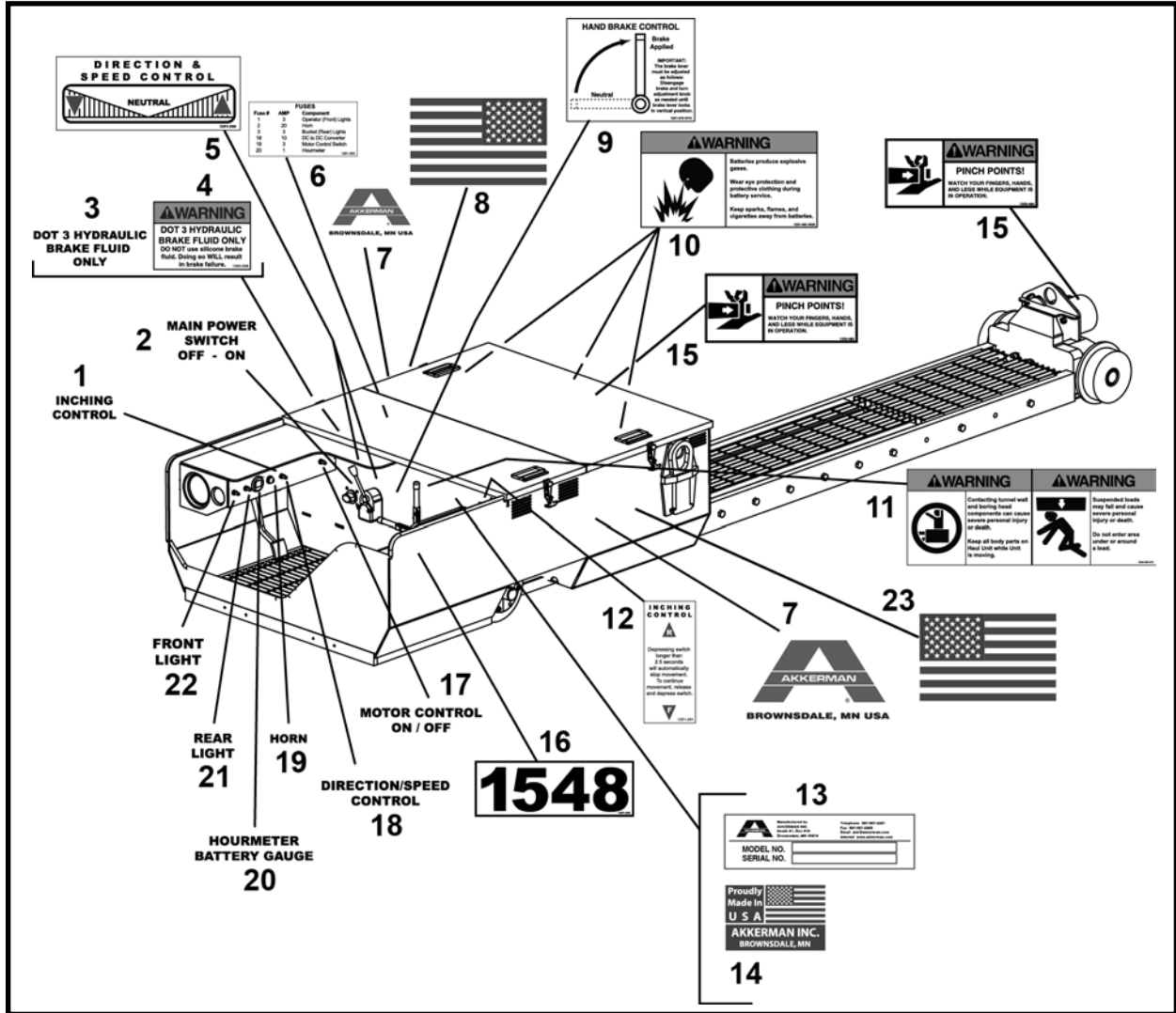
NOTES



Decals

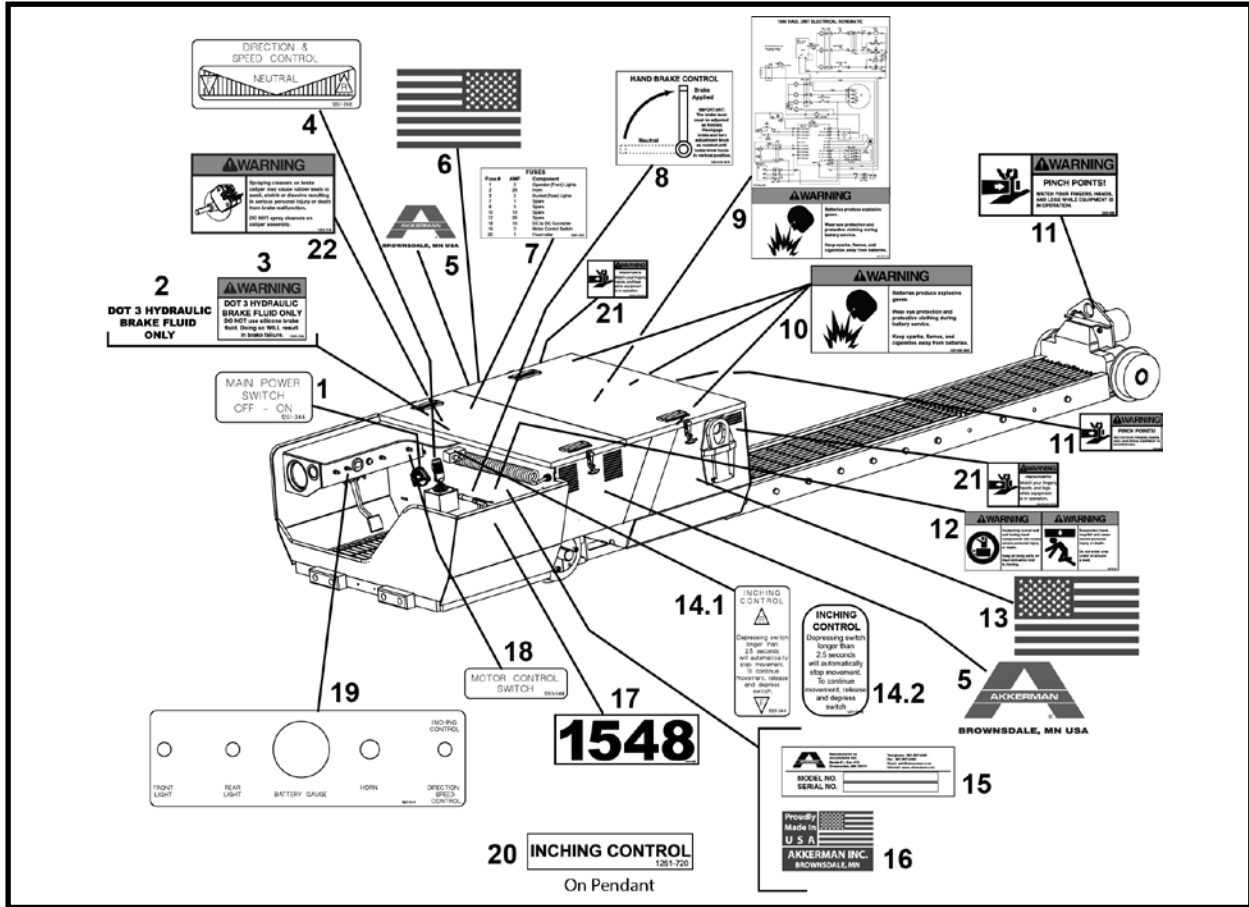
1548 Haul Unit	
SN F21700F-01 Only	2
SN F21700F-02 & After	3
Dirt Bucket	4

**1548 HAUL UNIT DECALS, 1255-025
SN F21700F-01 ONLY**



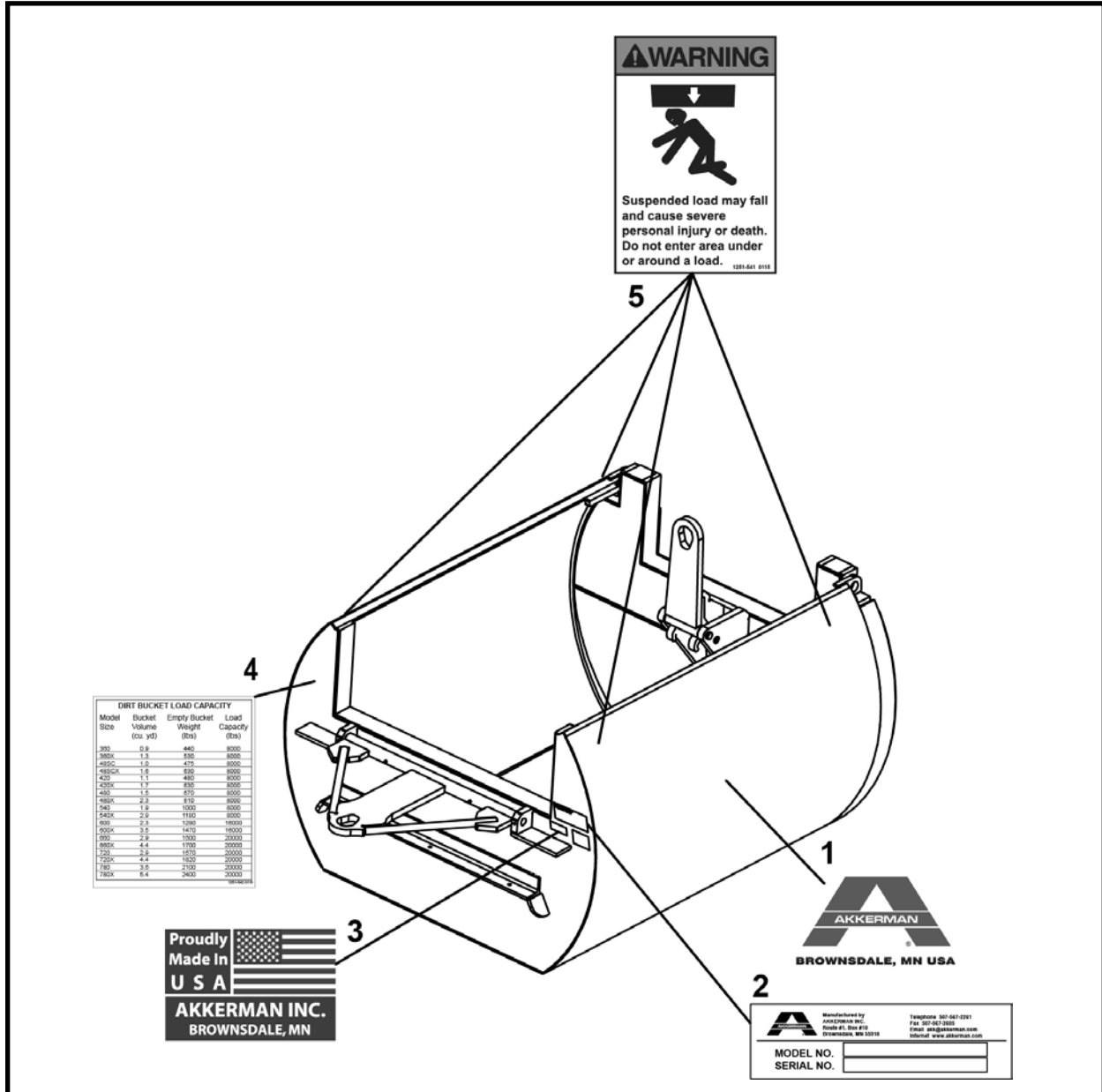
ITEM	QTY	PART NO.	DESCRIPTION
0	1	1255-025	KIT, Decal 1548
1	1	1251-269E	DECAL, Inching Control
2	1	1251-269G	DECAL, Main Power Switch
3	1	1251-269H	DECAL, DOT 3 Brake Fluid
4	1	1250-258	DECAL, Warning, DOT 3 Hydraulic Brake Fluid
5	2	1251-268	DECAL, Direction & Speed Control
6	1	1251-303	DECAL, Fuses
7	2	1251-246	DECAL, Akkerman, Large
8	1	1251-324	DECAL, Flag, Small - Right
9	1	1251-270	DECAL, Hand Brake Control
10	3	1251-063	DECAL, Warning, Battery Gases (2 on battery lifts)
11	1	1250-550	DECAL, Warning, Tunnel Contact, Suspended Loads
12	1	1251-291	DECAL, Inching Control
13	1	REF	PLATE, Serial Number
14	1	1250-544	DECAL, Made In USA
15	2	1250-480	DECAL, Warning, Pinch Points
16	2	1251-266	DECAL, Model 1548
17	1	1251-269F	DECAL, Motor Control
18	1	1251-269I	DECAL, Direction/Speed Control
19	1	1251-269D	DECAL, Horn
20	1	1251-269C	DECAL, Hourmeter Battery Gauge
21	1	1251-269B	DECAL, Rear Light
22	1	1251-269A	DECAL, Front Light
23	1	1250-558	DECAL, Flag, Small - Left

1548 HAUL UNIT DECALS, 1255-024
SN F21700F-02 & AFTER



ITEM	QTY	PART NO.	DESCRIPTION
0	1	1255-024	KIT, Decal 1548
1	1	1251-344C	DECAL, Main Power Switch
2	1	1251-269H	DECAL, DOT 3 Brake Fluid
3	1	1250-258	DECAL, Warning, DOT 3 Hydraulic Brake Fluid
4	2	1251-268A	DECAL, Direction & Speed Control
5	2	1251-246	DECAL, Akkerman, Large
6	1	1251-324	DECAL, Flag, Small - Right
7	1	1251-303	DECAL, Fuses
8	1	1251-270	DECAL, Hand Brake Control
9	1	1251-537	DECAL, Warning, Battery Gases, Schematic
10	3	1251-063	DECAL, Warning, Battery Gases (2 on battery lifts)
11	2	1250-480	DECAL, Warning Pinch Points
12	1	1250-550	DECAL, Warning, Tunnel Contact, Suspended Loads
13	1	1250-558	DECAL, Flag, Small - Left
14.1	1	1251-344D	DECAL, Inching Control (Earlier Models - Control on Unit)
14.2	1	1251-344E	DECAL, Inching Control (With Pendant Control)
15	1	REF	PLATE, Serial Number
16	1	1250-544	DECAL, Made In USA
17	2	1251-266	DECAL, Model 1548
18	1	1251-344B	DECAL, Motor Control Switch
19	1	1251-344A	DECAL, Console
20	1	1251-720	DECAL, Inching Control (For Pendant Control)
21	2	1250-562	DECAL, Warning Pinch Points
22	1	1252-158	DECAL, Warning, No Brake Cleaner

DIRT BUCKET DECALS, 1255-001



ITEM	QTY	PART NO.	DESCRIPTION
0	1	1255-001	KIT, Decal, Dirt Bucket
1	2	1251-245	DECAL, Akkerman, XLarge
2	1	REF	PLATE, Serial Number
3	1	1250-544	DECAL, Made in USA
4	1	1251-542	DECAL, Dirt Bucket Load Capacity
5	4	1251-541	DECAL, Warning, Overhead Load



Structurals

Haul Unit

1548 Haul Unit Assembly, F21700F	2
Stop (for Series II TBM), 024569A	3
Front Assembly, 021780A	4
Brake Assembly, 021778A	5
Seat Assembly, 021782A	6
Seat Assembly, 022155A	7
Drive Assembly, 021799A	8
Gear Box Assembly, 021750A	10
24" Track Gage Kit, 021716A	11

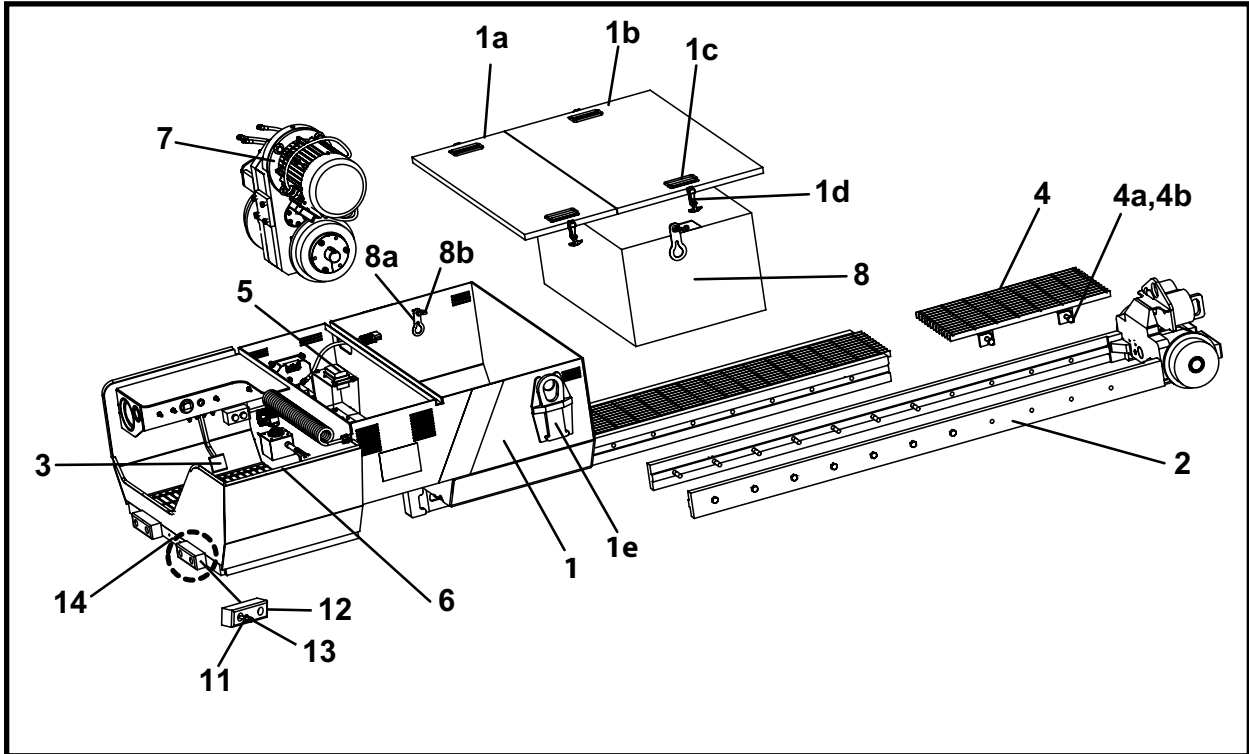
Dirt Buckets

600/600X, F20750F00/F20700F00	12
660, F10700F01	13
720/720X, F08670F00/F08675F00	14
780X, F19140F00	15

Track

Track (20 Gage)	16
Slider Track (Ring Beam & Lagging), 022840A	17
Track Riser, F09900F00	18
Track Carrier, F07270F00	19

1548 HAUL UNIT ASSEMBLY, F21700F



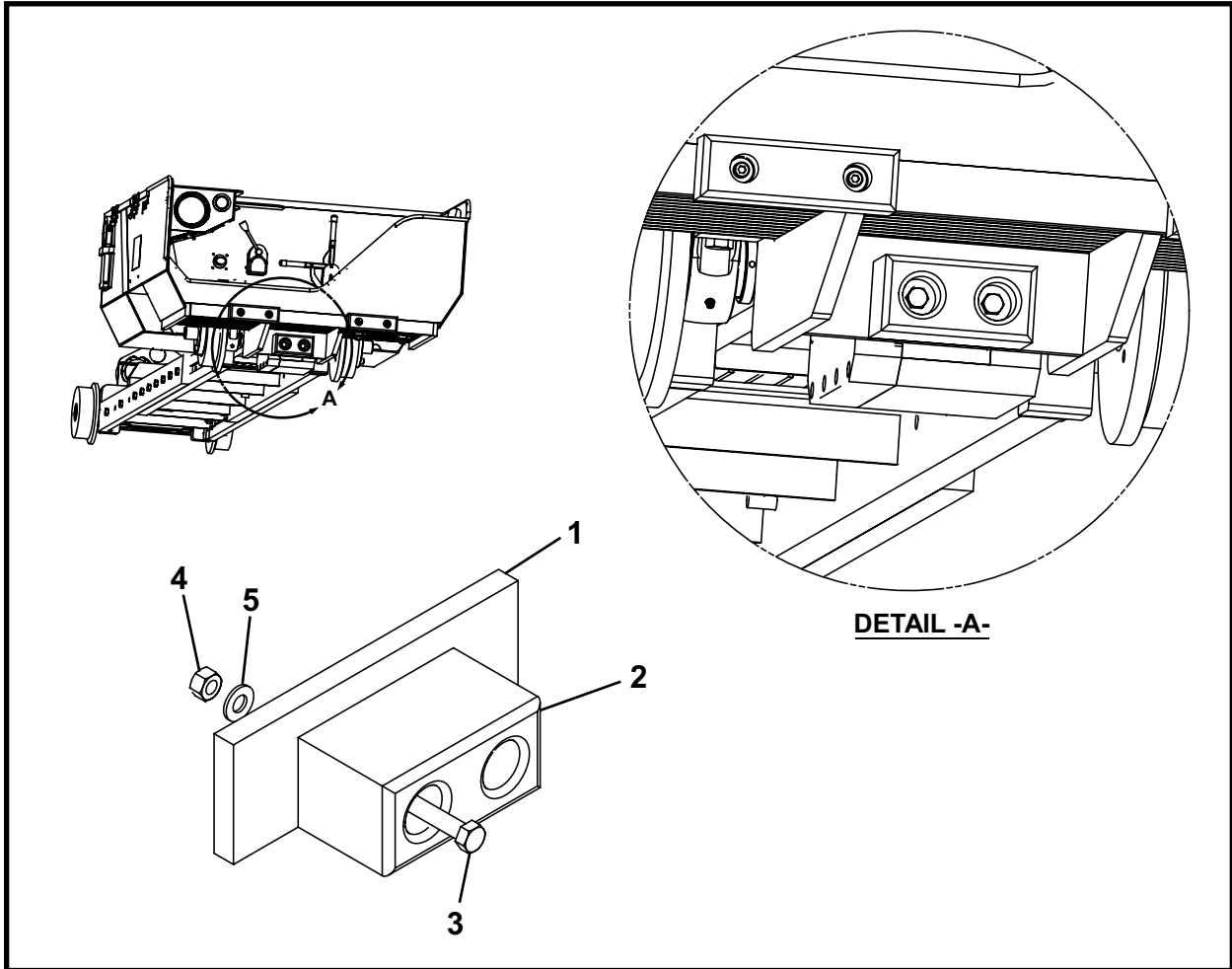
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F21700F	1548 HAUL UNIT ASSEMBLY
1	1	021774A	FRAME, 1548 (Includes items 1a - 1f)
1a	1	021771P	COVER, Drive Box
1b	1	021770P	COVER, Battery Box
1c	4	P0059-022	HANDLE
1d	4	P0059-031	FASTENER, Rubber Hood
1e	2	007794A00	LIFT EYE
2*	1	021780A	ASSEMBLY, Front
3*	1	021778A	ASSEMBLY, Brake
4*	1	021779A	EXTENSION, Front (Includes items 4a & 4b)
4a	4	P0001-10-012	BOLT, Hex 5/8 UNC x 3
4b	4	P0003-10-000	NUT, 5/8
5**	1	021781A	ASSEMBLY, Electrical
6.1*	1	021782A	ASSEMBLY, Seat (SN F21700F-11 & Before)
6.2*	1	022155A	ASSEMBLY, Seat (SN F21700F-12 & After)
7*	1	021799A	ASSEMBLY, Drive
8**	1	F0064-010	BATTERY PACK, 48 Volt (Includes items 8a - 8b)
8a	2	001235P00	LIFT EYE
8b	2	P0091-009	CLEVIS, 3/8
9*	***	021716A	KIT, 24" Gage Track (Not Shown)
10.1**	***	F0310-1003	CHARGER, Battery 48V 240VAC 60 Hz (Not Shown)
10.2**	***	F0310-1004	CHARGER, Battery 48V 240VAC 50 Hz (Not Shown)
11	4	P0040-006	WASHER, Hardened Flat 3/8
12	2	P0253-133	GUARD, Rubber
13	4	P0031-06-007	SCREW, Socket Head Cap 3/8 UNC x 1.75
14*	1	024569A	STOP ASSEMBLY (for Series II TBM) (SN F21700F-08 & Before)

* Refer to this section for parts information.

** Refer to Section 5, Electrical for parts information.

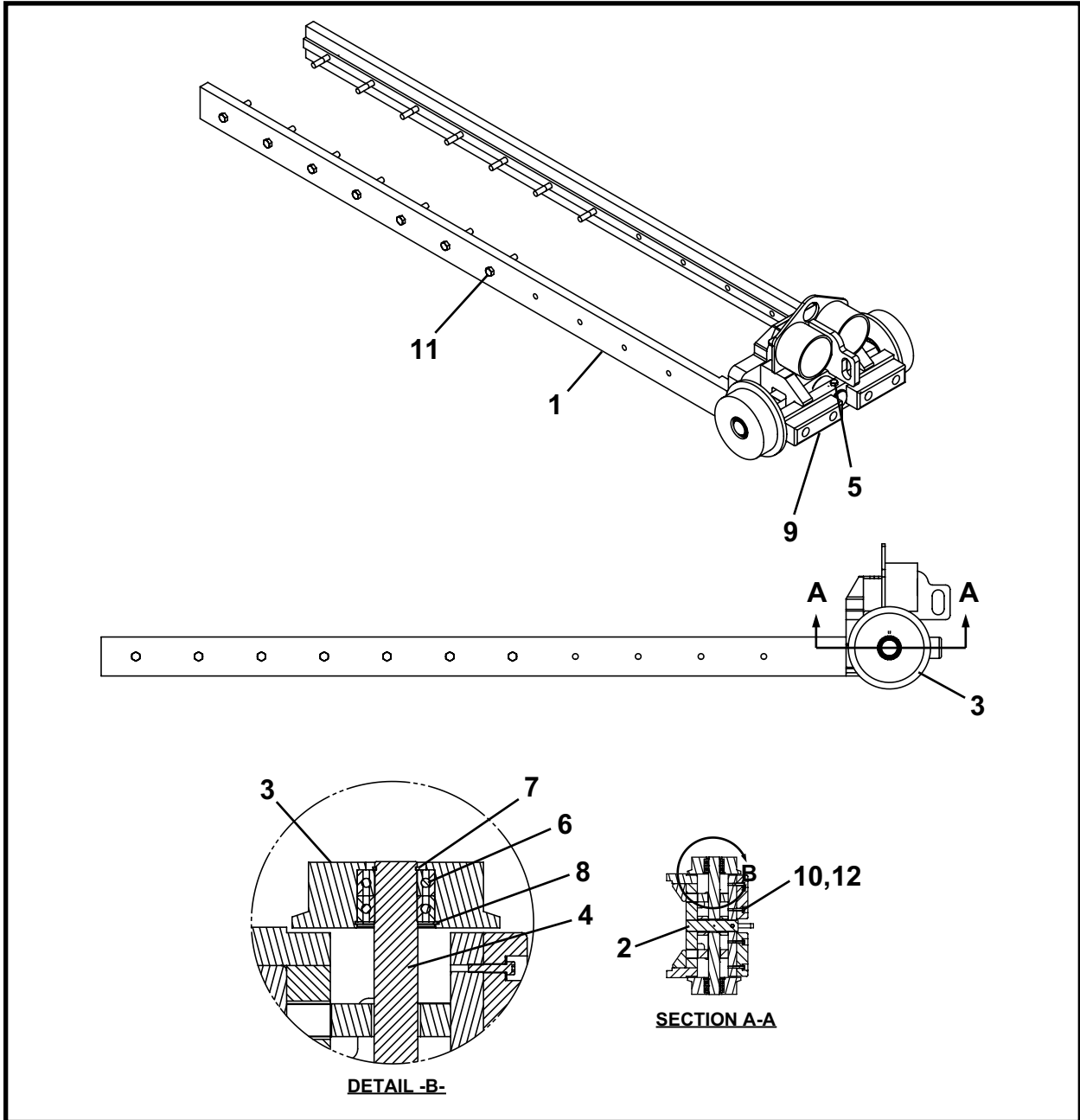
*** Optional

STOP ASSEMBLY, 024569A
SN F21700F-08 & BEFORE (For Series II TBM)



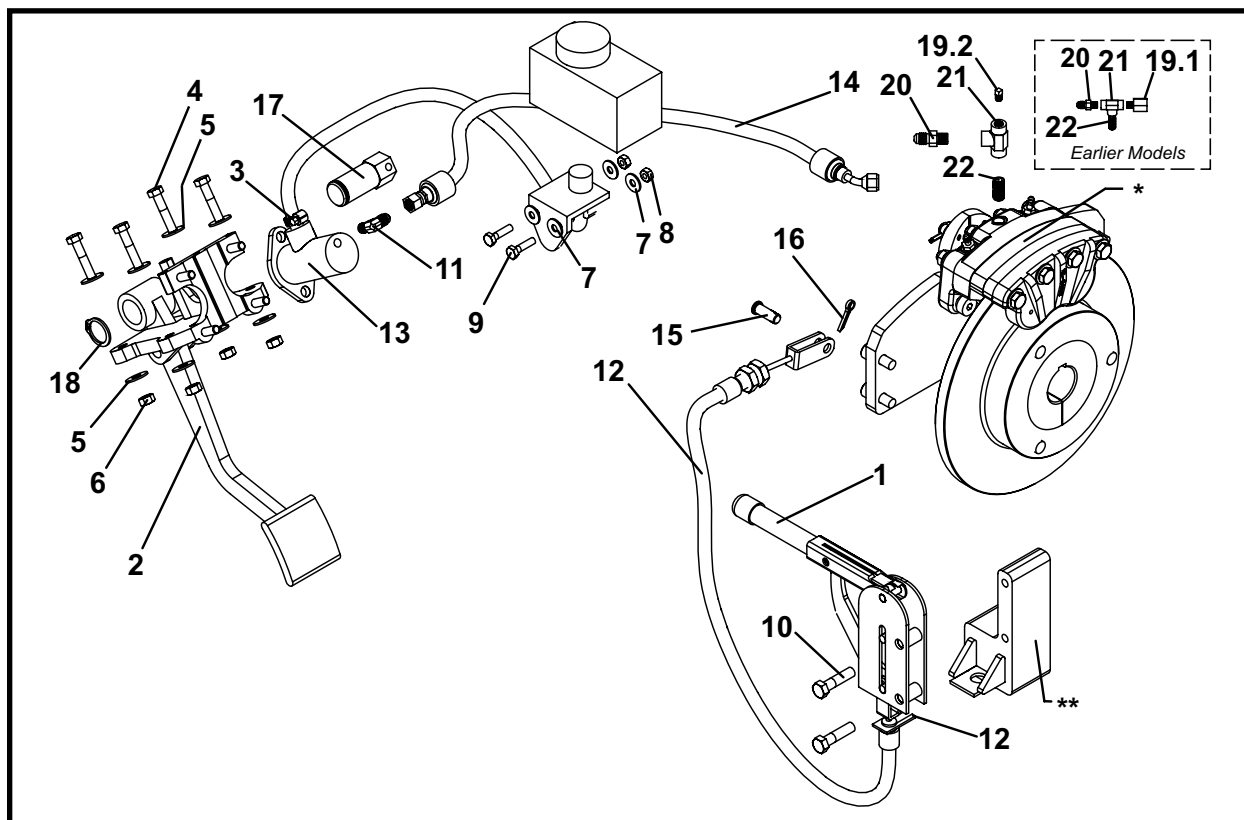
ITEM	QTY	PART NO.	DESCRIPTION
0	1	024569A	STOP ASSEMBLY
1	1	024572P	BRACE
2	1	P0253-135	BUMPER, Rubber
3	2	P0001-08-014	BOLT, Hex 1/2 UNC x 3.5
4	2	P0003-08-000	NUT, Hex 1/2
5	2	P0040-008	WASHER, Hardened Flat 1/2

FRONT ASSEMBLY, 021780A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	021780A	FRONT ASSEMBLY
1	1	021701A	EXTENSION, Frame
2	1	021703P	PIN, Front Axle Pivot
3	2	021711P	WHEEL, Idler
4	1	021712A	ASSEMBLY, Idler Axle 20 GA (Includes item 4a)
4a	1	P0063-003	FITTING, Grease 1/4-28 90 Degree
5	1	P0001-08-016	BOLT, Hex 1/2 UNC x 4
6	4	P0065-005	BEARING
7	2	P0077-054	SNAP RING
8	2	P0077-055	SNAP RING
9	2	P0253-133	GUARDS, Rubber
10	4	P0040-006	WASHER, Hardened Flat 3/8
11	14	P0001-10-016	BOLT, Hex 5/8 UNC x 4
12	4	P0031-06-007	SCREW, Socket Head Cap 3/8 UNC x 1.75

BRAKE ASSEMBLY, 021778A



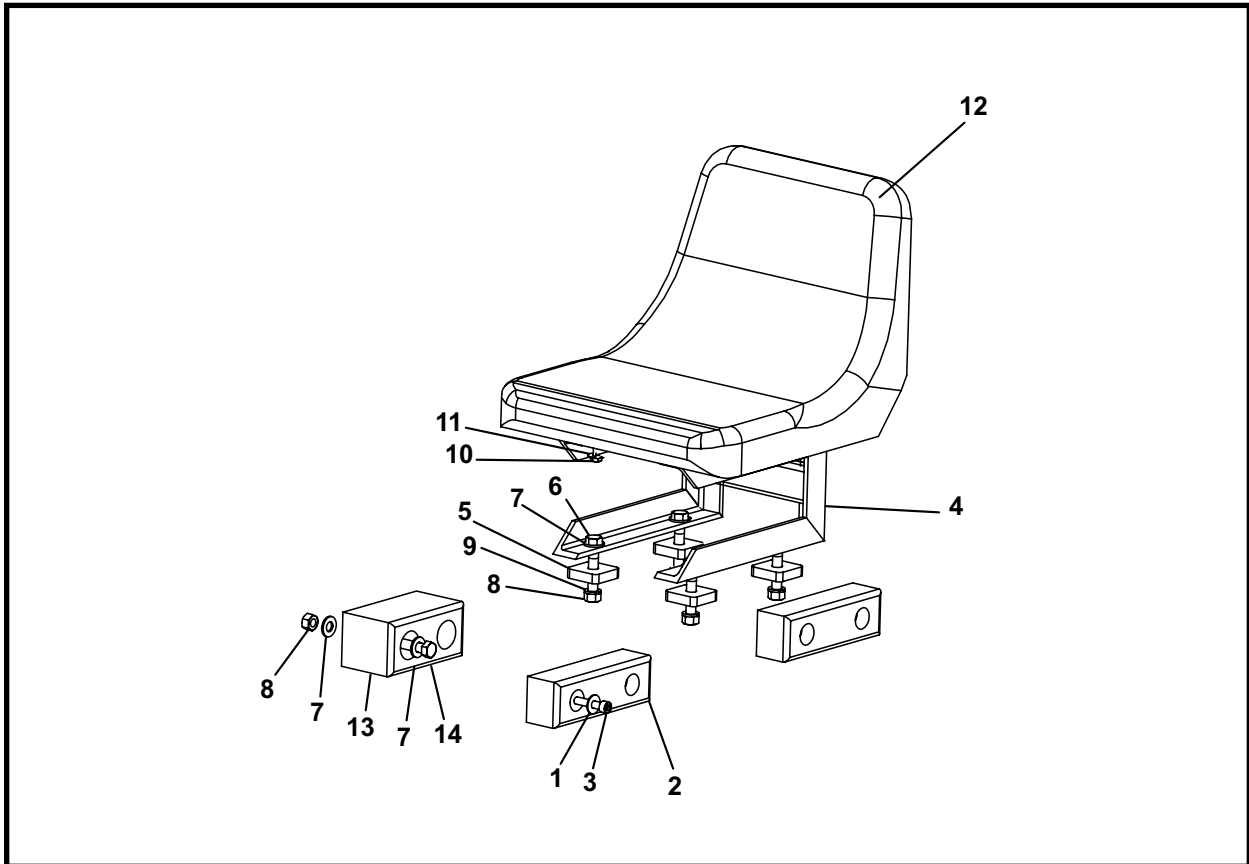
ITEM	QTY	PART NO.	DESCRIPTION
0	1	021778A	BRAKE ASSEMBLY
1	1	P0102-110	HANDLE
2	1	P0115-015	PEDAL, Brake
3	2	P0201-293	CLAMP, Radiator
4	4	P0001-05-006	BOLT, Hex 5/16 UNC x 2.25
5	4	P0040-005	WASHER, Hardened Flat 5/16
6	4	P0003-05-000	NUT, 5/16
7	2	P0040-004	WASHER, Hardened Flat 1/4
8	2	P0003-04-000	NUT, 1/4
9	2	P0001-04-004	BOLT, Hex 1/4 UNC x 1
10	2	P0001-06-006	BOLT, Hex 3/8 UNC x 1.5
11	2	P0300-418	FITTING, 04MJ-02MP90-FGD
12	1	P0102-111	CABLE, Brake
13	1	P0115-014	KIT, Master Cylinder (Includes items 13a - 13c)
13a	1	-	Master Cylinder
13b	1	-	Bracket
13c***	1	-	Reservoir
14	1	A10404A-026	ASSEMBLY, Hose 1/4 x 26
15	1	P0024-004	PIN, Clevis
16	1	P0048-032	PIN, Cotter
17	1	022112P	PIN, Brake Pivot
18	1	P0077-011	SNAP RING
19.1	1	P0300-760	FITTING, 02MP-04FP (Earlier Models)
19.2	1	P0416-000	PLUG, 1/8 Square Head (Later Models)
20	1	P0300-363	FITTING, 04MJ-02MP
21	1	P0300-226	FITTING, 02FP-02FP-02FP
22	1	P0402-000	NIPPLE, Close 1/8

* Reference P0115-012 Brake Caliper; see Drive Assembly, 021799A in this section.

** Reference 022101A Brake Mount

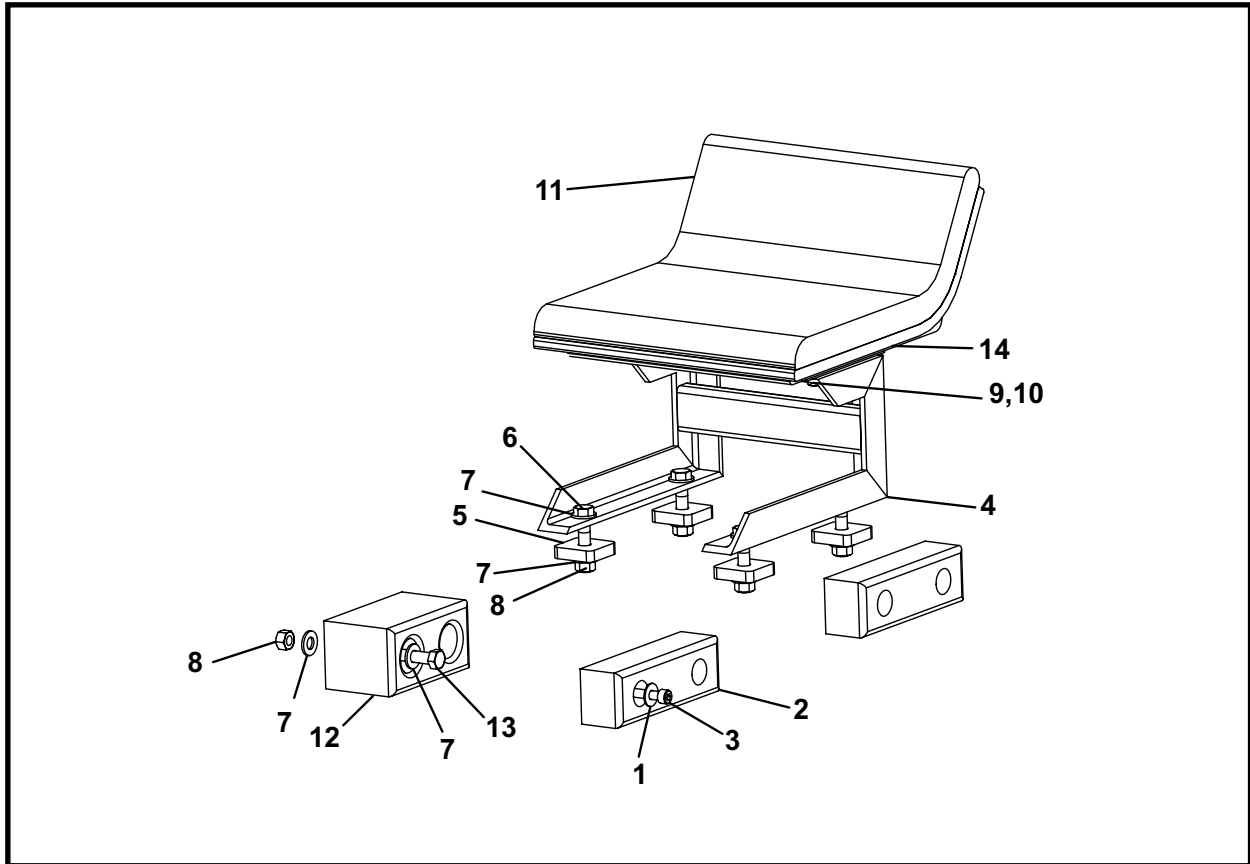
*** Use DOT 3 Brake Fluid, P0126-051

SEAT ASSEMBLY, 021782A
SN F21700F-11 & BEFORE



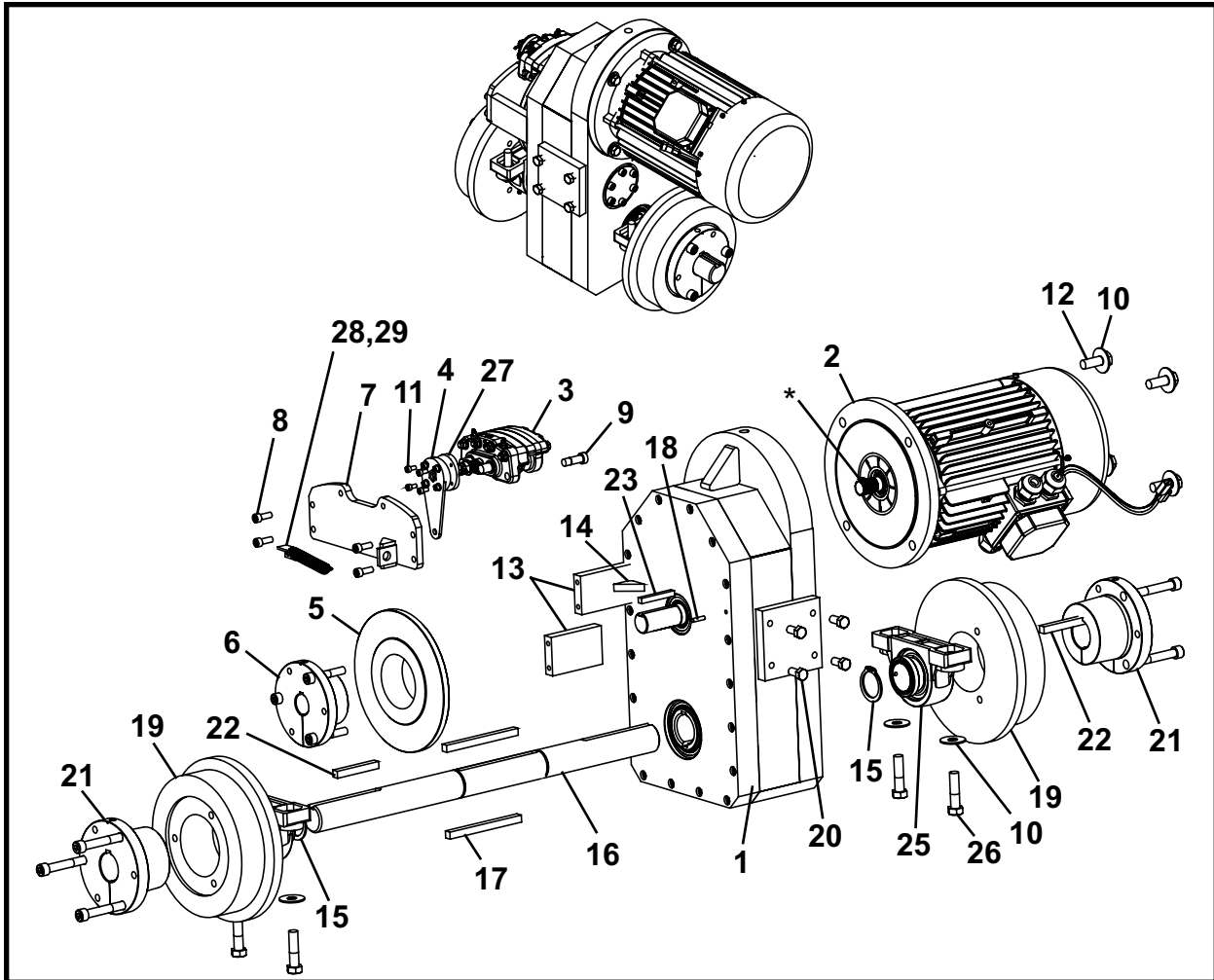
ITEM	QTY	PART NO.	DESCRIPTION
0	1	021782A	SEAT ASSEMBLY
1	4	P0040-006	WASHER, Hardened Flat 3/8
2	2	P0253-133	GUARDS, Rubber
3	4	P0031-06-007	SCREW, Socket Head Cap 3/8 UNC x 1.75
4	1	022175A	MOUNT, Seat
5	4	022174P	PLATE, Seat Retainer
6	4	P0001-08-010	BOLT, Hex 1/2 UNC x 2.5
7	8	P0040-008	WASHER, Hardened Flat 1/2
8	6	P0003-08-000	BOLT, Hex 1/2 UNC
9	0	P0045-008	WASHER, Lock 1/2
10	4	P0001-05-003	BOLT, 5/16 UNC x .75
11	4	P0045-005	WASHER, Hardened Flat 5/16
12	1	P0113-002	SEAT
13	1	P0253-135	BUMPER, Rubber
14	2	P0001-08-016	BOLT, Hex 1/2 UNC x 4

SEAT ASSEMBLY, 022155A
SN F21700F-12 & AFTER



ITEM	QTY	PART NO.	DESCRIPTION
0	1	022155A	LOW SEAT ASSEMBLY
1	4	P0040-006	WASHER, Hardened Flat 3/8
2	2	P0253-133	GUARDS, Rubber
3	4	P0031-06-007	SCREW, Socket Head, 3/8 UNC x 1.75
4	1	022154A	MOUNT, Seat
5	4	0022174P	PLATE, Seat Retainer
6	4	P0001-08-010	BOLT, Hex 1/2 UNC x 2.5
7	12	P0040-008	WASHER, Hardened Flat 1/2
8	6	P0003-08-000	NUT, Hex 1/2 UNC
9	4	P0001-05-004	BOLT, Hex 5/16 UNC x 1
10	4	P0040-005	WASHER, Hardened Flat 5/16
11	1	P0113-001	SEAT
12	1	P0253-135	BUMPER, Rubber
13	2	P0001-08-014	BOLT, Hex 1/2 UNC x 3.5
14	2	009993P00	MOUNT, Seat

DRIVE ASSEMBLY, 021799A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	021799A	DRIVE ASSEMBLY
1***	1	021750A	GEAR BOX ASSEMBLY
2****	1	021190A	DRIVE MOTOR ASSEMBLY
3	1	P0115-012	CALIPER, Brake (includes items 3a - 3b)
3a	4	P0115-012A	PADS, Pads
3b	4	P0115-012B	SCREW, Retaining Pad
4	1	P0115-013	CAM LEVER
5	1	021768P	DISC, Brake
6	1	P0066-122	BUSHING
7	1	021789A	MOUNT, Brake Caliper
8	4	P0031-06-004	SCREW, Socket Head Cap 3/8 UNC x 1
9	2	P0030S-06-006	BOLT, Shoulder 1/2 x 3/8 x 1.5
10	8	P0040-010	WASHER, Hardened Flat 5/8
11	1	P0031-04-002	SCREW, Socket Head Cap 1/4 UNC x .5
12	4	P0001-10-007	BOLT, Hex 5/8 UNC x 1.75
13	2	NSS	BAR, Caliper Mount
14	2	NSS	GUSSET
15	2	P0077-056	SNAP RING
16	1	021769P	AXLE, Drive
17	2	021796P	KEY
18	2	NSS	PIN

DRIVE ASSEMBLY, 021799A

ITEM	QTY	PART NO.	DESCRIPTION
19	2	021790P	WHEEL, Rear Drive
20	4	P0001-08-004	BOLT, Hex 1/2 UNC x 1
21	2	P0066-121	BUSHING
22	2	021794P	KEY
23	1	021788P	KEY
24**	5 QT	P0126-009	OIL, Synthetic Gear Case 626
25	2	P0065-062	BEARING
26	4	P0001-10-010	BOLT, Hex 5/8 UNC x 2.5
27	1	P0115-016	CAM
28	1	032265P	BRACKET, Spring
29	1	P0070-004	SPRING

QT - Quart

NSS - Not Sold Separately

* Lubricate input splines with anti-fretting grease.

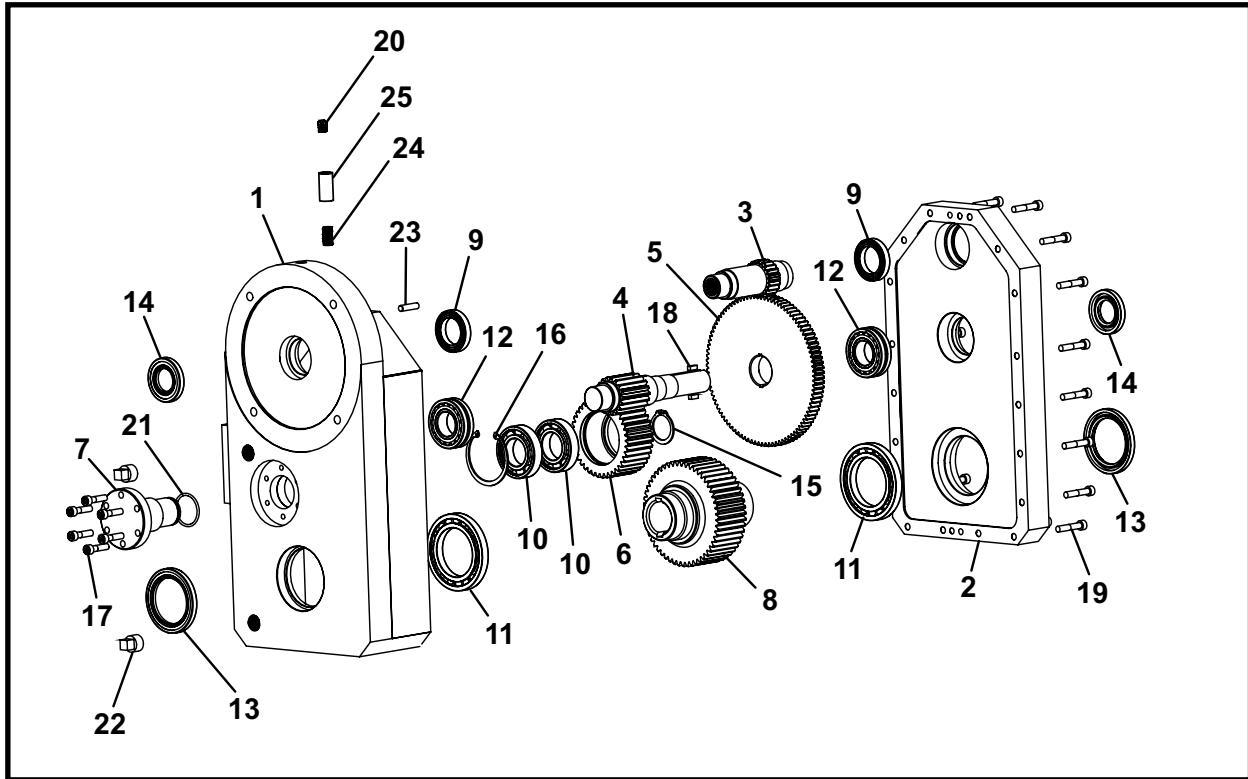
** Fill gear case with oil; level with fill hole.

*** Refer to this section for parts information.

**** Refer to section 8, Motors for parts information.

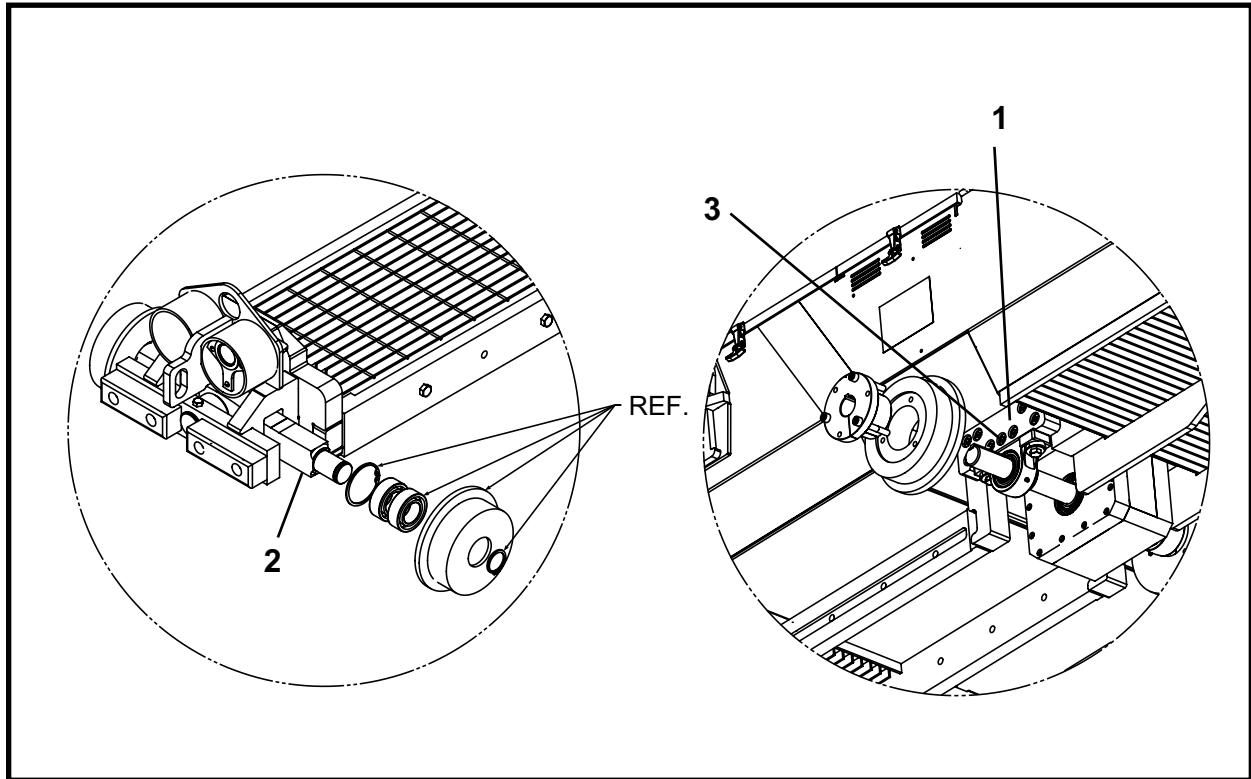
NOTE: Tighten all bolts to standard lubricated torques.

GEAR BOX ASSEMBLY, 021750A



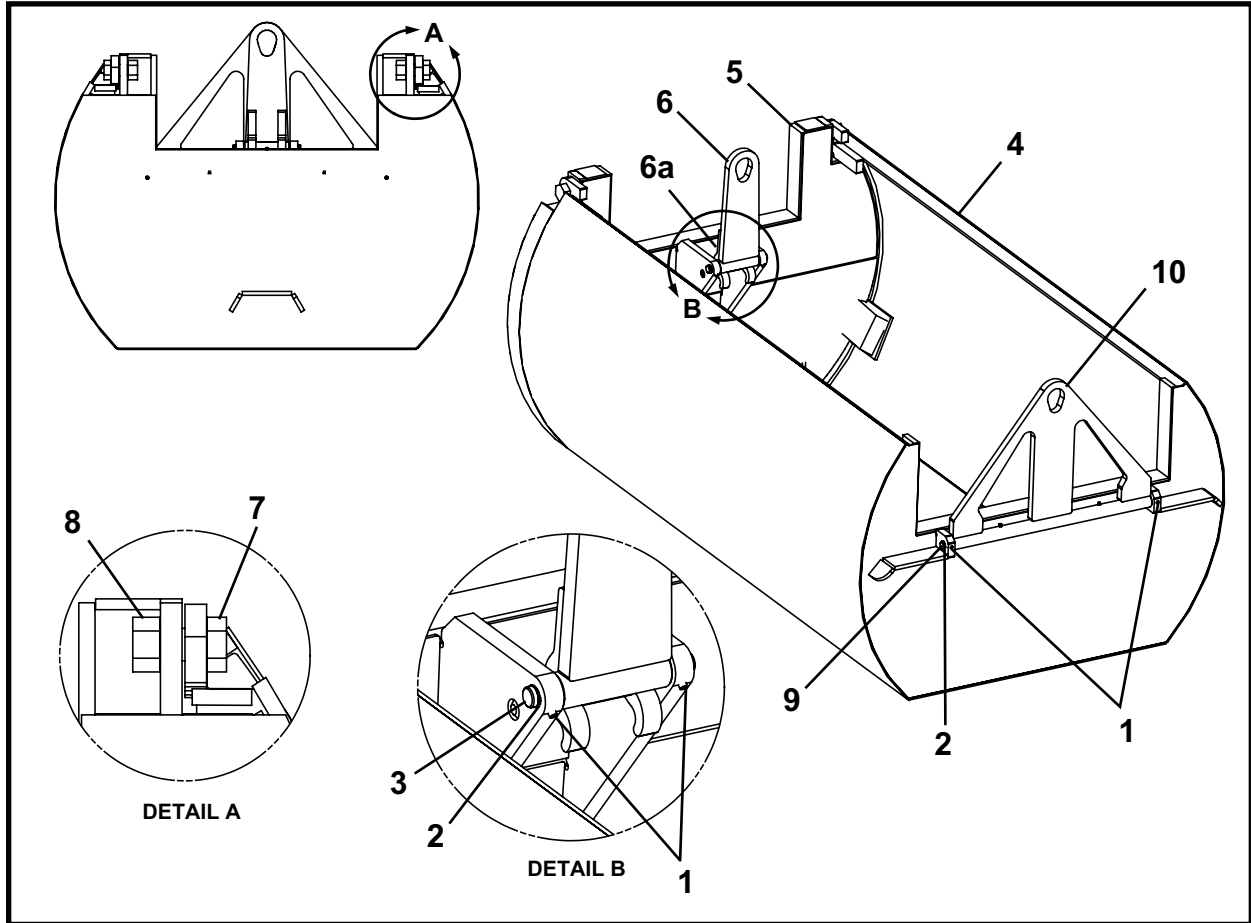
ITEM	QTY	PART NO.	DESCRIPTION
0	1	021750A	ASSEMBLY, Gear Box
1	1	021751A	CASE, Gear
2	1	021752P	COVER, Gear Case
3	1	021753P	SHAFT, Input
4	1	021754P	SHAFT, Intermediate
5	1	021755P	GEAR
6	1	021756P	GEAR, Idler
7	1	021757P	PIN, Idler
8	1	021758P	GEAR, Output
9	2	P0065-276	BEARING
10	2	P0065-277	BEARING
11	2	P0065-278	BEARING
12	2	P0065-266	BEARING, Spherical Roller
13	2	P0080-041	SEAL
14	2	P0080-042	SEAL
15	1	P0077-061	RING, Snap
16	1	P0077-062	RING, Snap
17	6	P0031-06-006B	SCREW, Socket Head Cap 3/8 UNC x 1.5
18	2	021191P	KEY, 1/4 x 1/4
19	18	P0031-06-008	SCREW, Socket Head Cap 3/8 UNC x 2
20	1	P0063-012	FITTING, Grease 1/4 UNF
21	1	P0085-225	ORING
22	2	P0416-004	PLUG
23	2	021672P	ROD
24	1	P0402-000	NIPPLE, Close 1/8
25	1	P0400-00A	COUPLING, Half 1/8

24" TRACK GAGE KIT, 021716A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	021716A	KIT, 24" Track Gage
1	2	021761P	BLOCK
2	1	021759A	ASSEMBLY, Idler Axle 24" GA
3	18	P0031-12-008	SCREW, Socket Head Cap 3/4 UNC x 2

DIRT BUCKET
600/600X



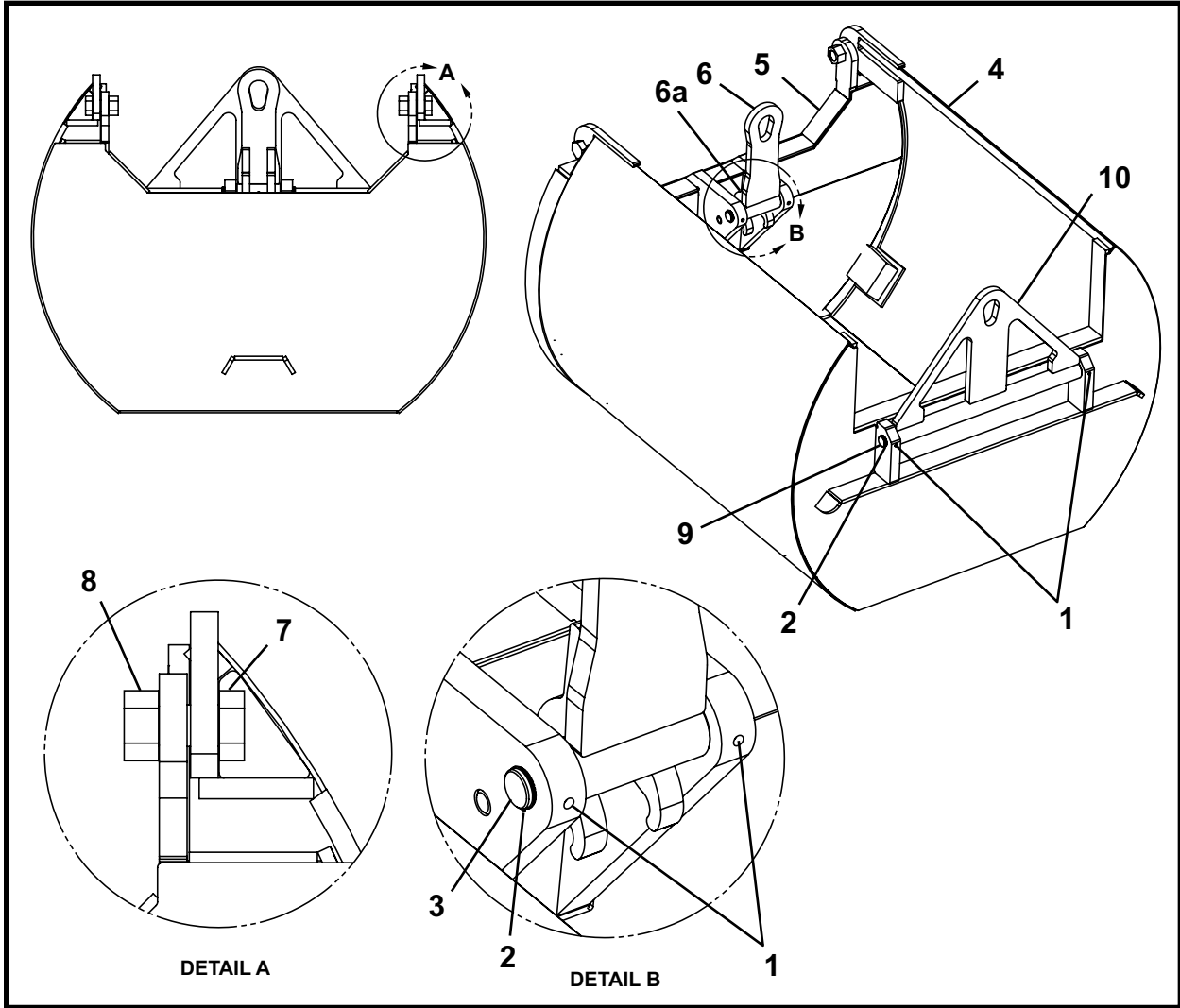
ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	F20750F00	DIRT BUCKET, 600
0.2	1	F20700F00	DIRT BUCKET, 600X
1	4	P0032-003	SET SCREW, 3/8 UNC x 3/8
2	4	P0077-012	SNAP RING
3	1	009237P00	PIN
4	-	-	DIRT BUCKET
5	1	020701A00	DOOR
6	1	010708A00	LIFT EYE, Door (includes item 6a)
6a	1	P0063-001	FITTING, Grease 1/4 UNF
7	2	P0001-20-022	BOLT, Hex 1-1/2 -6 UNC x 5.5
8	2	P0003-24-000	NUT, Hex 1-1/2 UNC
9	1	007889P00	PIN, Lift Bar Hinge
10	1	020703A00	LIFT EYE, Front (includes item 10a)
10a	2	P0063-001	FITTING, Grease 1/4 UNF
11	-	-	-
12	-	-	-
13*	1	1255-001	KIT, Decal, Dirt Bucket

NOTE: The 600 and 600X buckets are not to be used with 524 Haul Unit unless test fit to yoke and TBM.

* Not Shown

DIRT BUCKET, F10700F01

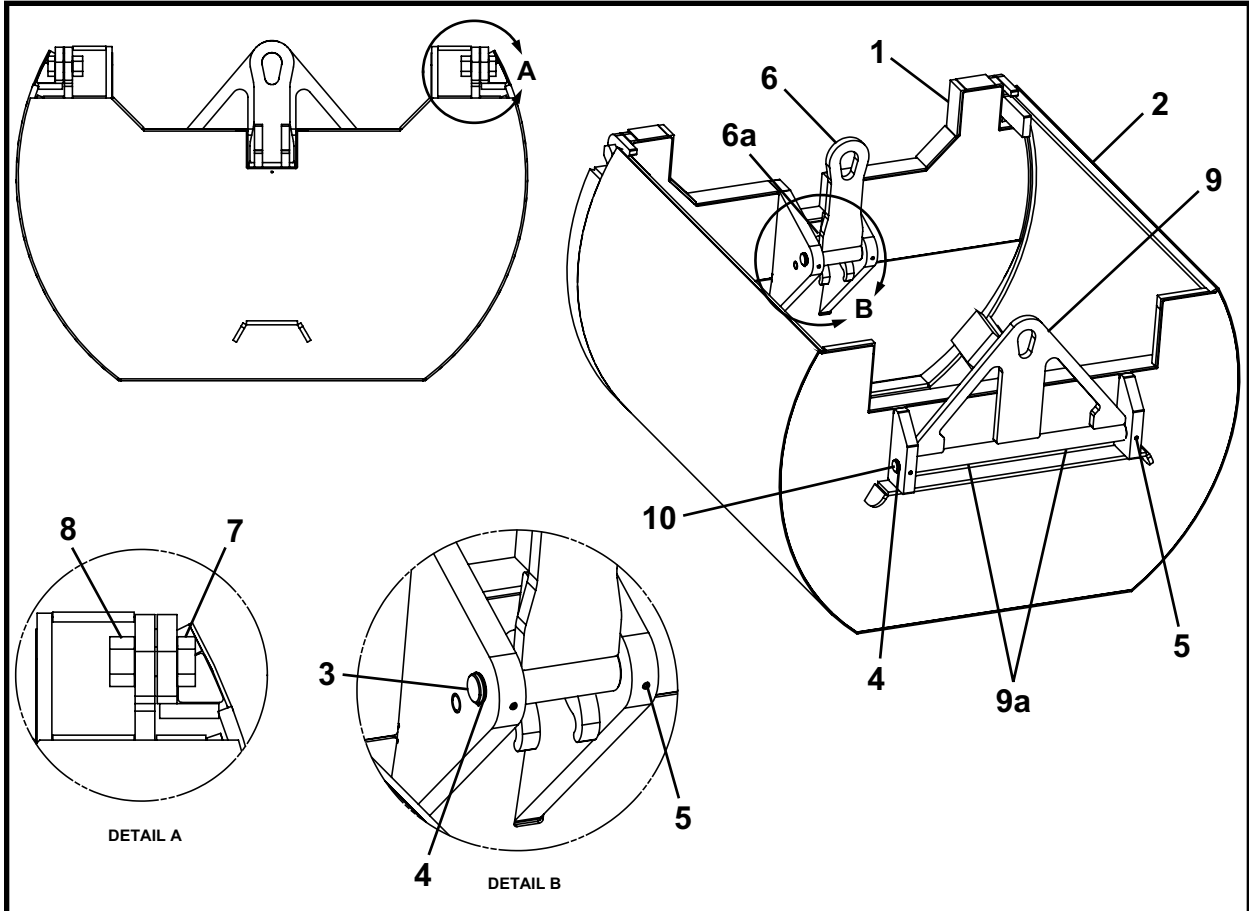
660



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F10700F01	DIRT BUCKET, 660
1	4	P0032-003	SET SCREW, 3/8 UNC x .375
2	4	P0077-021	SNAP RING
3	1	014575P00	PIN, Door Lift Eye
4	-	-	DIRT BUCKET
5	1	010703A01	DOOR
6	1	014566A00	LIFT EYE, Door (includes item 6a)
6a	1	P0063-001	FITTING, Grease 1/4 UNF
7	2	P0001-20-022	BOLT, Hex 1-1/2 UNC x 5.5
8	2	P0003-24-000	NUT, Hex 1-1/2 UNC
9	1	014576P00	PIN, Door Lift Eye
10	1	014567A00	LIFT EYE, Front (includes item 10a)
10a	2	P0063-001	FITTING, Grease 1/4 UNF
11	-	-	-
12	-	-	-
13*	1	1255-001	KIT, Decal, Dirt Bucket

* Not Shown

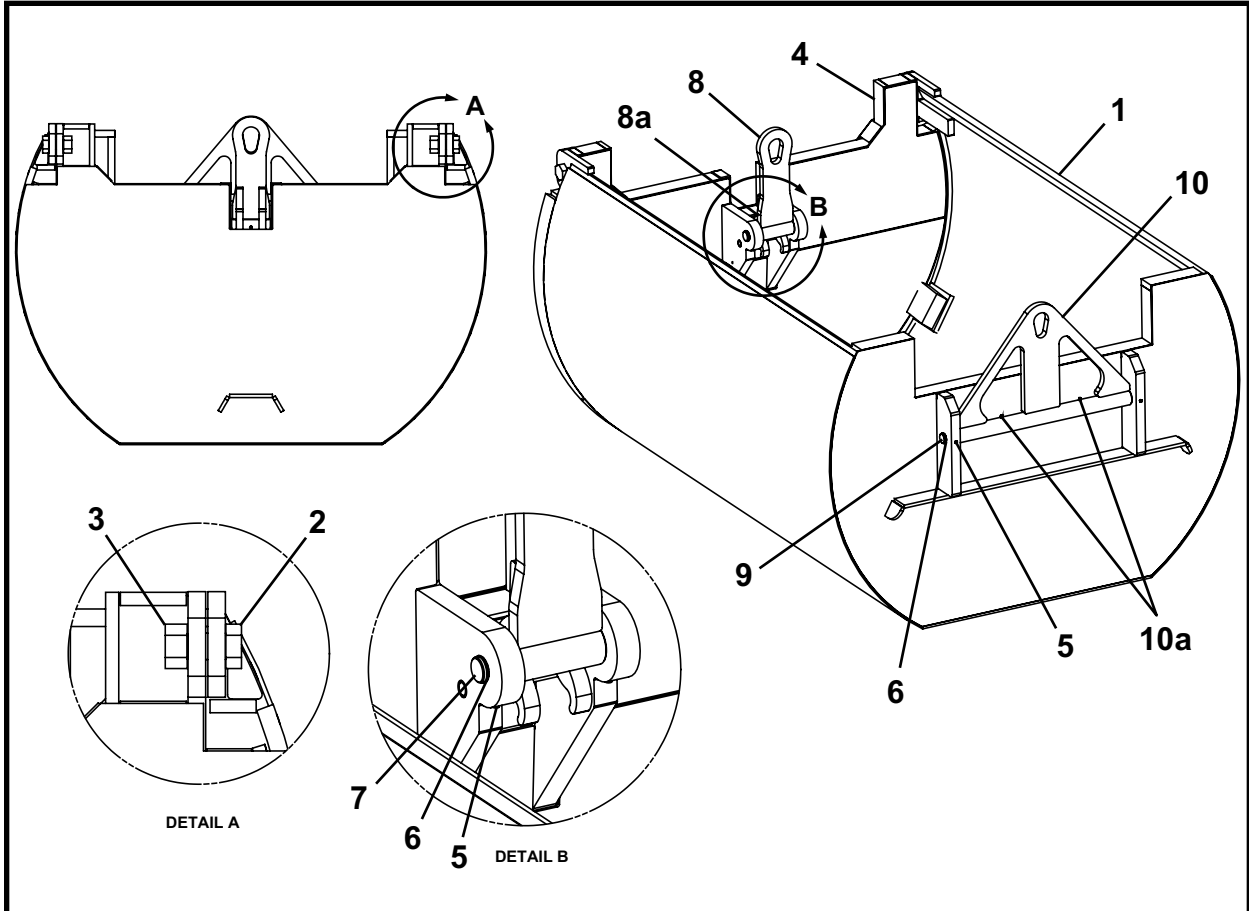
DIRT BUCKET 720/720X



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	F08670F00	DIRT BUCKET, 720
0.2	1	F08675F00	DIRT BUCKET, 720X
1	1	007860A03	DOOR
2	-	-	DIRT BUCKET
3	1	014575P00	PIN, Lift Bar Hinge
4	4	P0077-021	SNAP RING
5	4	P0032-003	SET SCREW, 3/8 UNC x .375
6	1	014566A00	LIFT EYE, Door (includes item 6a)
6a	1	P0063-001	FITTING, Grease 1/4 UNF
7	2	P0001-20-022	BOLT, Hex 1-1/2 UNC x 5.5
8	2	P0003-24-000	NUT, Hex 1-1/2 UNC
9	1	014567A00	LIFT EYE, Front (includes item 9a)
9a	2	P0063-001	FITTING, Grease 1/4 UNF
10	1	014576P00	PIN, Door Lift Eye
11	-	-	-
12	-	-	-
13*	1	1255-001	KIT, Decal, Dirt Bucket

* Not Shown

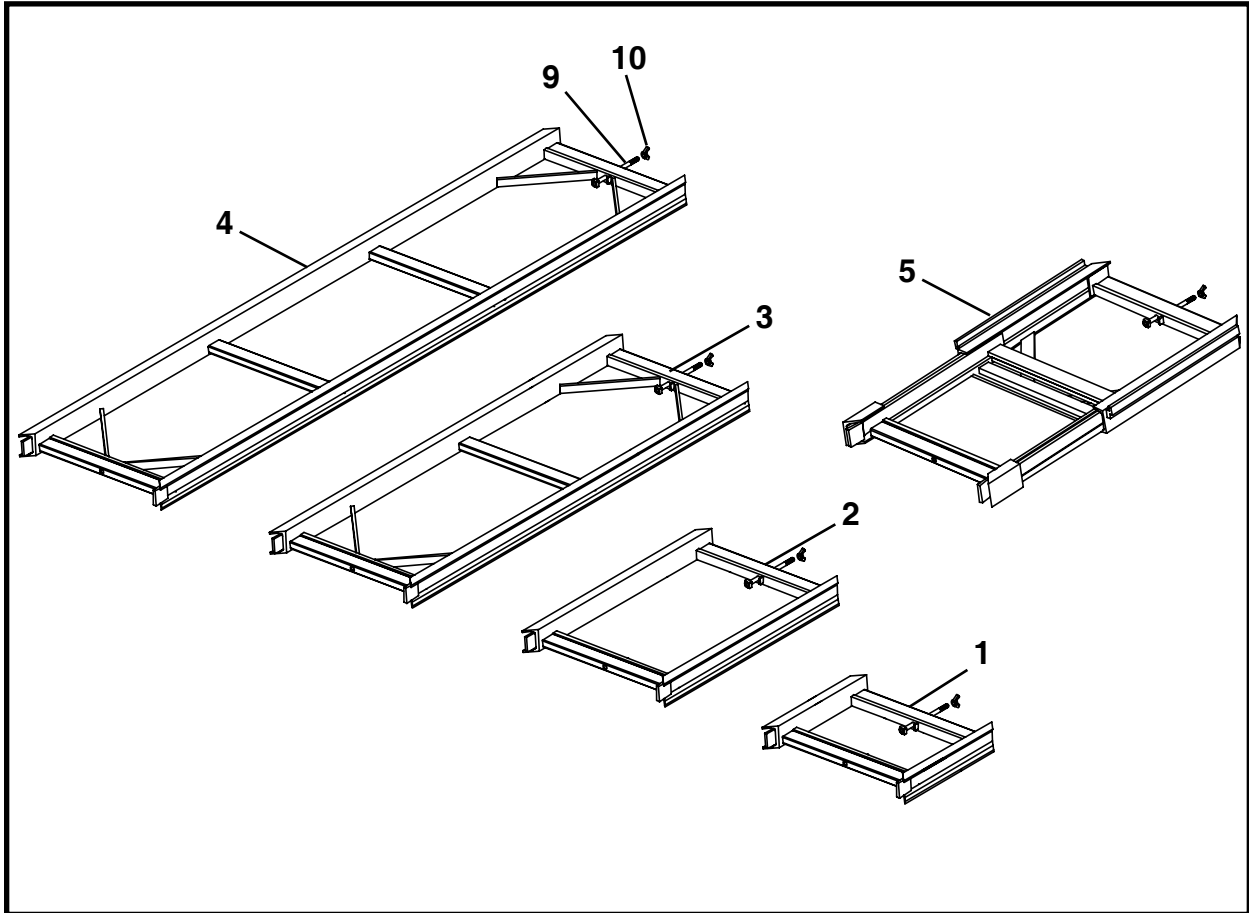
**DIRT BUCKET, F19140F00
780X**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F19140F00	DIRT BUCKET, 780X
1	-	-	DIRT BUCKET
2	2	P0001-20-022	BOLT, 1-1/2 UNC x 5.5
3	2	P0003-24-000	NUT, Hex 1-1/2 UNC
4	1	019136A01	DOOR
5	4	P0032-003	SET SCREW, 3/8 UNC x .375
6	4	P0077-021	SNAP RING
7	1	014575P00	PIN, Lift Eye Door
8	1	014566A00	LIFT EYE, Door (Includes item 8a)
8a	1	P0063-001	FITTING, Grease 1/4 UNF
9	1	014576P00	PIN, Lift Eye Door
10	1	014597A	LIFT EYE (Includes item 10a)
10a	2	P0063-001	FITTING, Grease 1/4 UNF
11	-	-	-
12	-	-	-
13*	1	1255-001	KIT, Decal, Dirt Bucket

* Not Shown

**TRACK
(20 GAGE)**

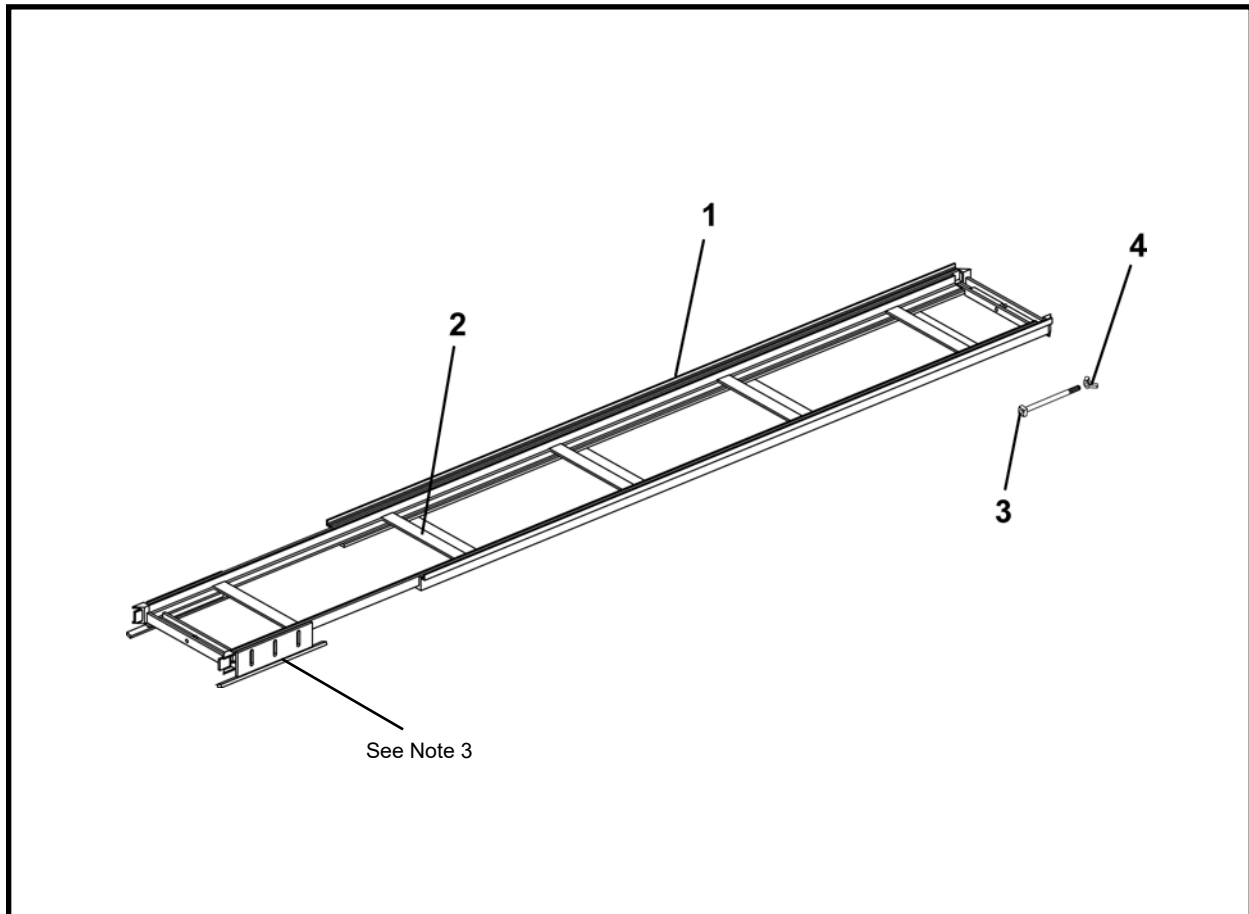


ITEM	QTY	PART NO.	DESCRIPTION
1	1	007247A00	STARTER TRACK, 1 Foot
2	1	007246A00	STARTER TRACK, 2 Foot
3	1	007246A00	STARTER TRACK, 4 Foot
4	1	F07244F00	TRACK, 8 Foot
5	1	F12220F02	TRACK, Slider 13 in.
6*	1	F31275F	TRACK, Slider 13 in., 8.5 in. Ext.
7*	1	F61782F	TRACK, Slide 25 in.
8*	1	F17084F00	TRACK, Slider 36 in.
9	A/N	007242A00	BOLT, Track
10	A/N	P0012-08-000	NUT, Wing 1/2 UNC

A/N - As Needed

* Not Shown

**SLIDER TRACK (RING BEAM & LAGGING), 022840A
(20 GAGE)**



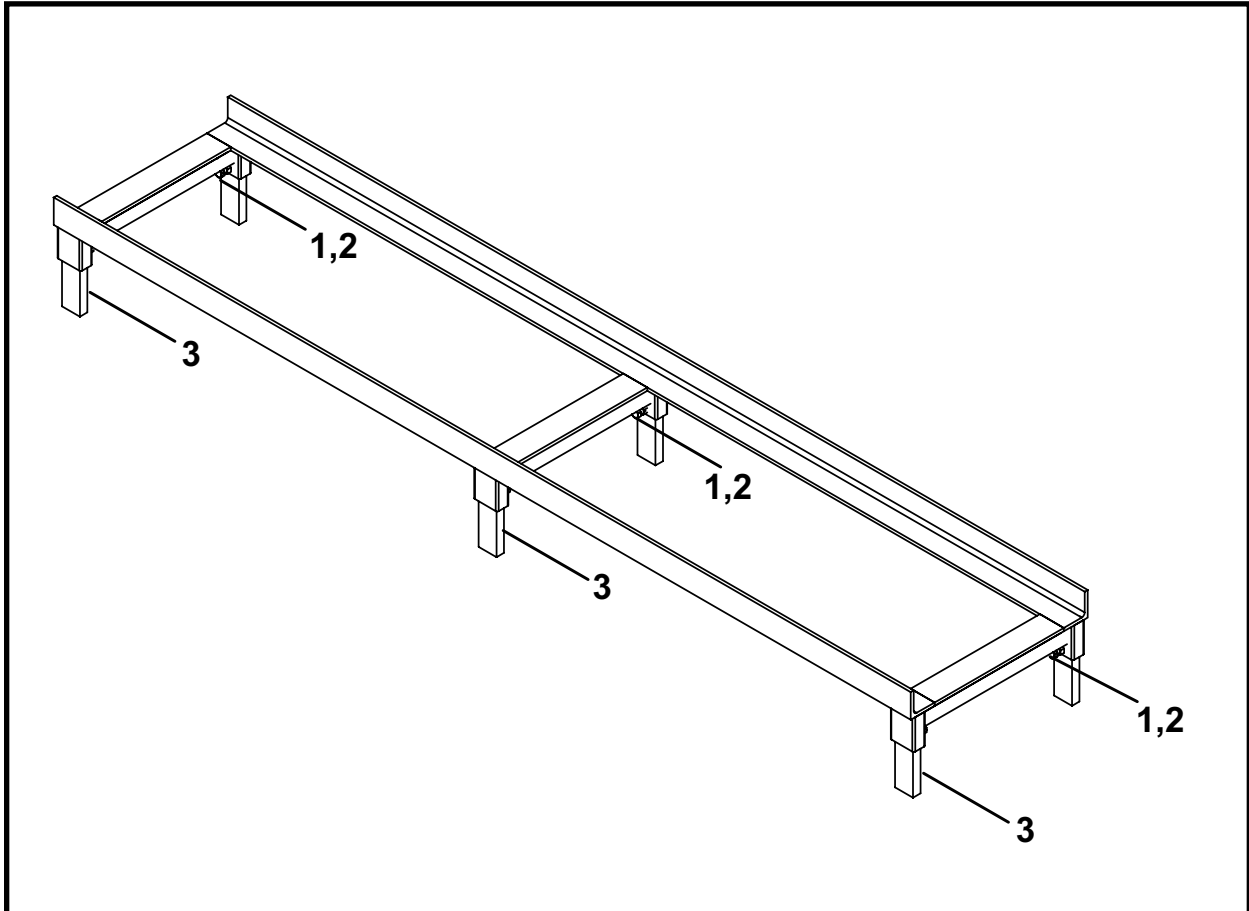
ITEM	QTY	PART NO.	DESCRIPTION
1	1	022840A	TRACK, Slider (Ring Beam & Lagging)
2	12	1250-480	DECAL, Warning, Pinch Points
3*	1	007242A00	BOLT, Track
4*	1	P0012-08-000	NUT, Wing 1/2 UNC

* Not part of 022840A Slider Track.

NOTE:

1. Track approximately 260" long extended with 50" overlap between inner and outer track.
2. Track approximately 175" long when fully collapsed.
3. Runner height is sized for 660 TBM with 70" ID ring beam. Different ring beams will require different runner height. For more information, contact your Akkerman Aftermarket Support representative.

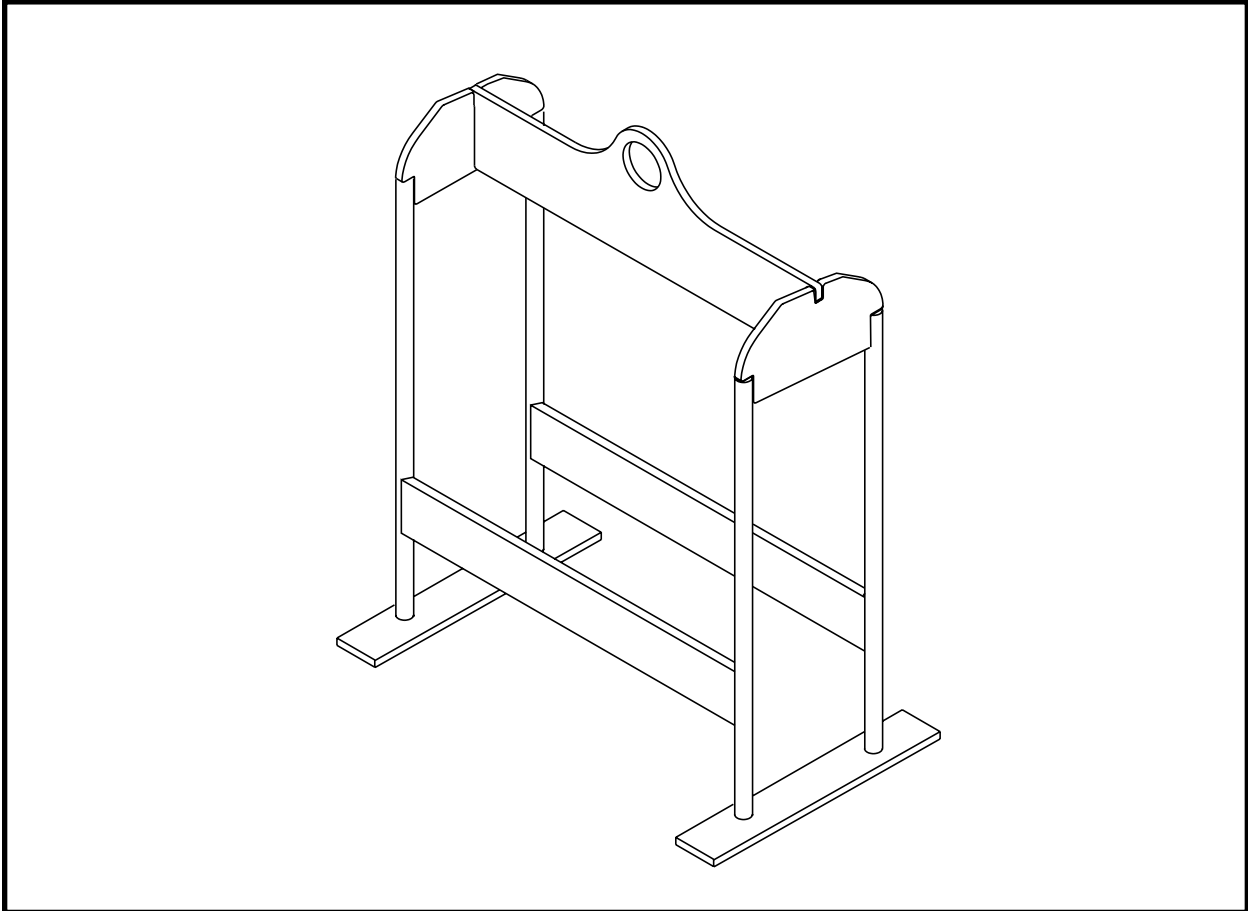
TRACK RISER, F61043F



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F61043F	TRACK RISER
1	6	P0001-06-003	BOLT, Hex 3/8 UNC x .75
2	6	P0003-06-000	NUT, Hex 3/8 UNC
3*	6	009901P01	BAR

* The bar length is variable depending upon job setup.

TRACK CARRIER, F07270F00



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F07270F00	TRACK CARRIER

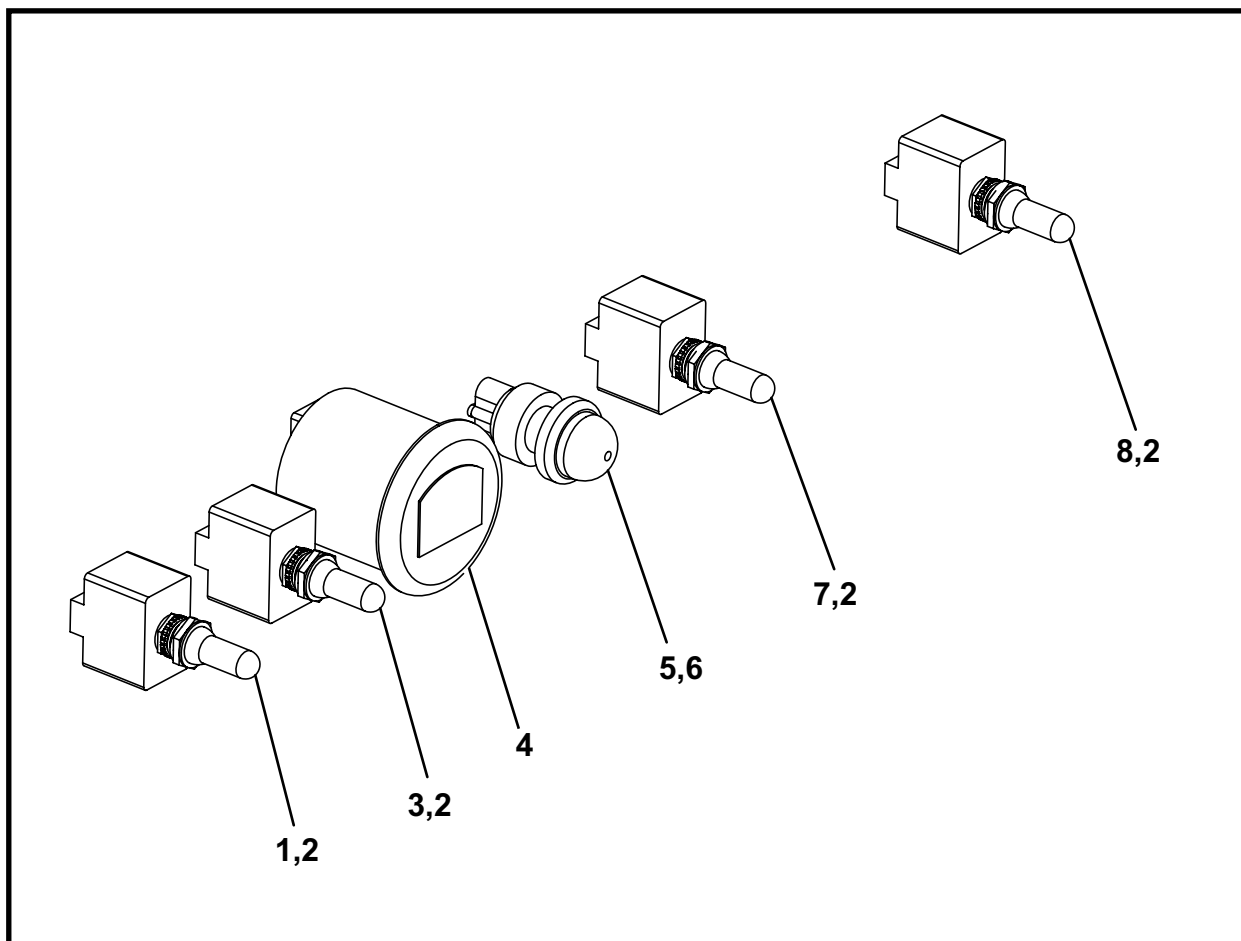
NOTES



Operator Controls

Dash Controls	2
Parking Brake	3
Direction / Speed Control (SN F21700F-28 & Before)	4
Direction / Speed Control (SN F21700F-29 & After)	5
Inching Control (SN F21700F-28 & Before)	6
Inching Control (SN F21700F-29 & After)	7

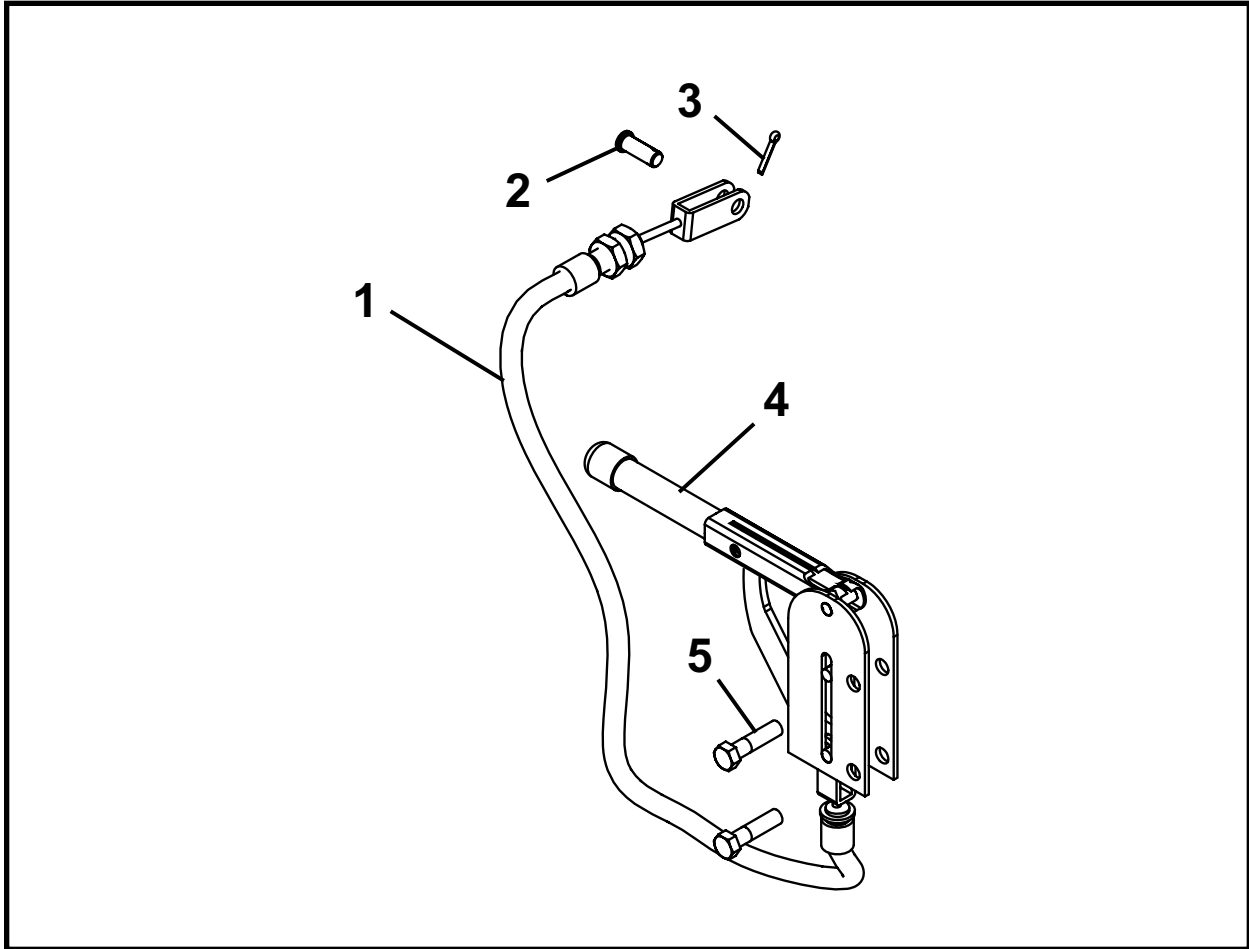
OPERATOR CONTROLS DASH CONTROLS



ITEM	QTY	PART NO.	DESCRIPTION
1.1	1	P0251-373	SWITCH, Toggle (Front Light Switch) (SN 21700F-01 thru 12)
1.2	1	P0056-147	SWITCH, Toggle (Front Light Switch) (SN 21700F-13 & After)
2	4	P0056-010	BOOT, Toggle
3.1	1	P0251-373	SWITCH, Toggle (Rear Light Switch) (SN 21700F-01 thru 12)
3.2	1	P0056-147	SWITCH, Toggle (Rear Light Switch) (SN 21700F-13 & After)
4.1*	1	P0251-378	GAUGE (Battery Gauge/Hourmeter) (SN F21700F-01 thru 06)
4.2	1	P0251-580	GAUGE (Battery Gauge) (SN F21700F-07 & After)
5	1	P0056-001	SWITCH, (Horn)
6	1	P0056-002	BOOT
7.1	1	P0251-373	SWITCH, Toggle (Propulsion Control) (SN 21700F-01 thru 12)
7.2	4	P0056-147	SWITCH, Toggle (Propulsion Control) (SN 21700F-13 & After)
8.1	1	P0251-373	SWITCH, Toggle (Motor Control) (SN 21700F-01 thru 12)
8.2	1	P0056-147	SWITCH, Toggle (Motor Control) (SN 21700F-13 & After)

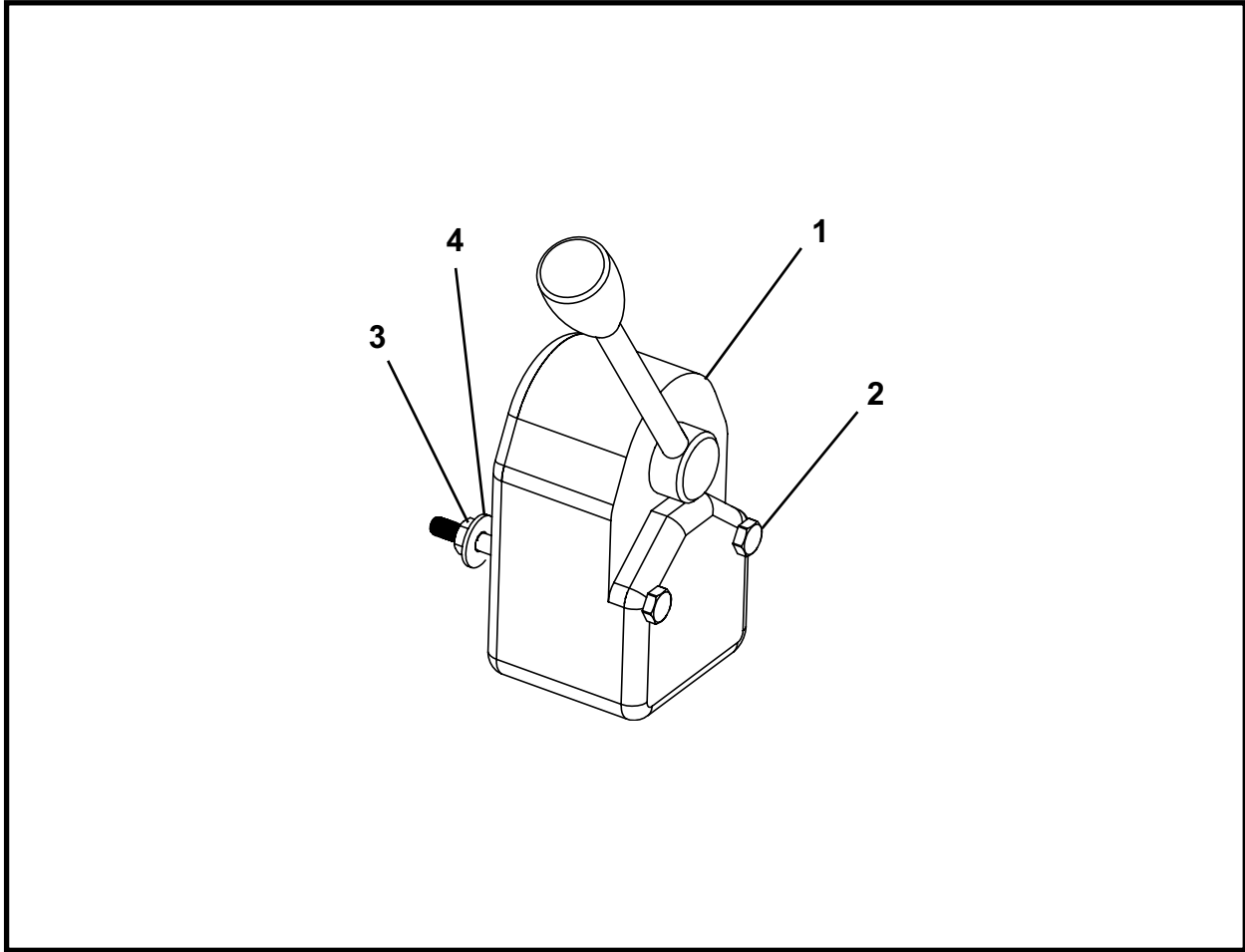
* Gauge P0251-378 is no longer available. If gauge requires replacement for haul units SN F21700F-01 thru 06, order P0251-580 Gauge and P0251-581 Connector. Contact your Akkerman Aftermarket Support representative for more information.

PARKING BRAKE



ITEM	QTY	PART NO.	DESCRIPTION
1	1	P0102-111	CABLE, Brake
2	1	P0024-004	PIN, Clevis
3	1	P0048-032	PIN, Cotter
4	1	P0102-110	PARKING BRAKE
5	2	P0001-06-006	BOLT, Hex 3/8 UNC x 1.5

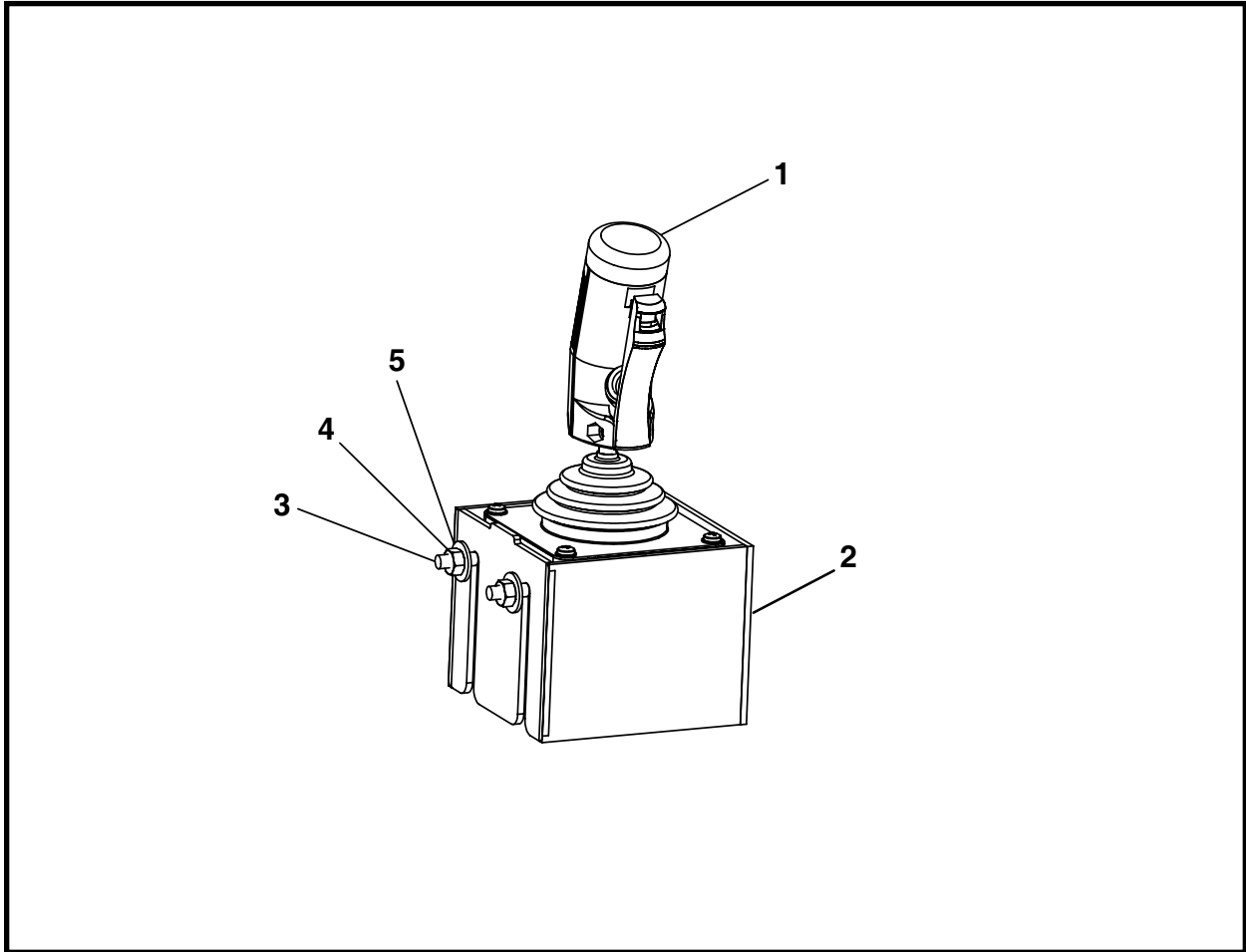
DIRECTION/SPEED CONTROL
SN F21700F-28 & BEFORE



ITEM	QTY	PART NO.	DESCRIPTION
1	1	P0302-677	CONTROL, Joystick
2	2	P0001-04-013	BOLT, Hex 1/4 UNC x 3.5
3	2	P0003-04-000	NUT, 1/4 UNC
4	2	P0040-004	WASHER, Hardened Flat 1/4
5*	1	P0054-556	CONNECTOR, 6 Pin Circular

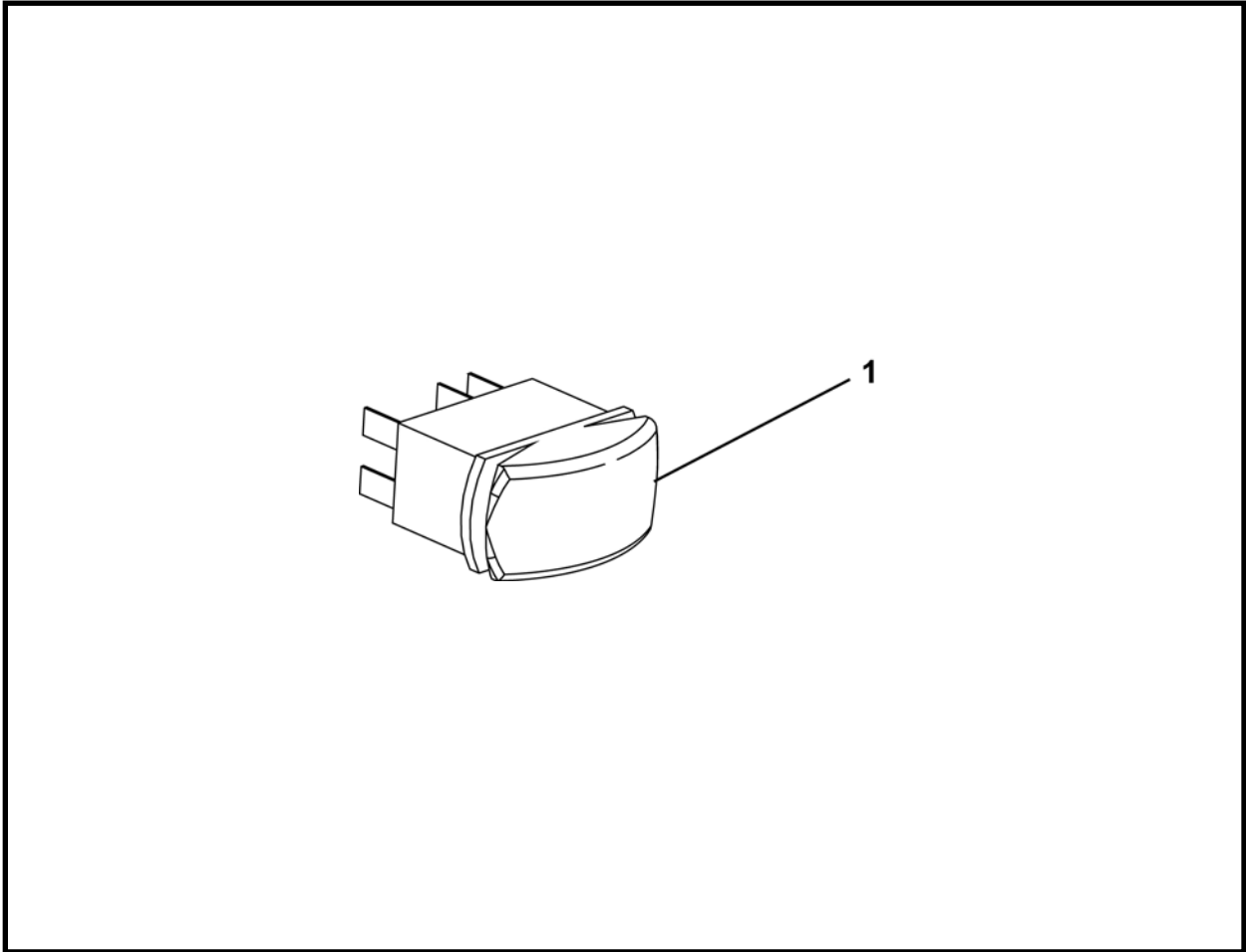
* Not Shown

DIRECTION/SPEED CONTROL
SN F21700F-29 & AFTER



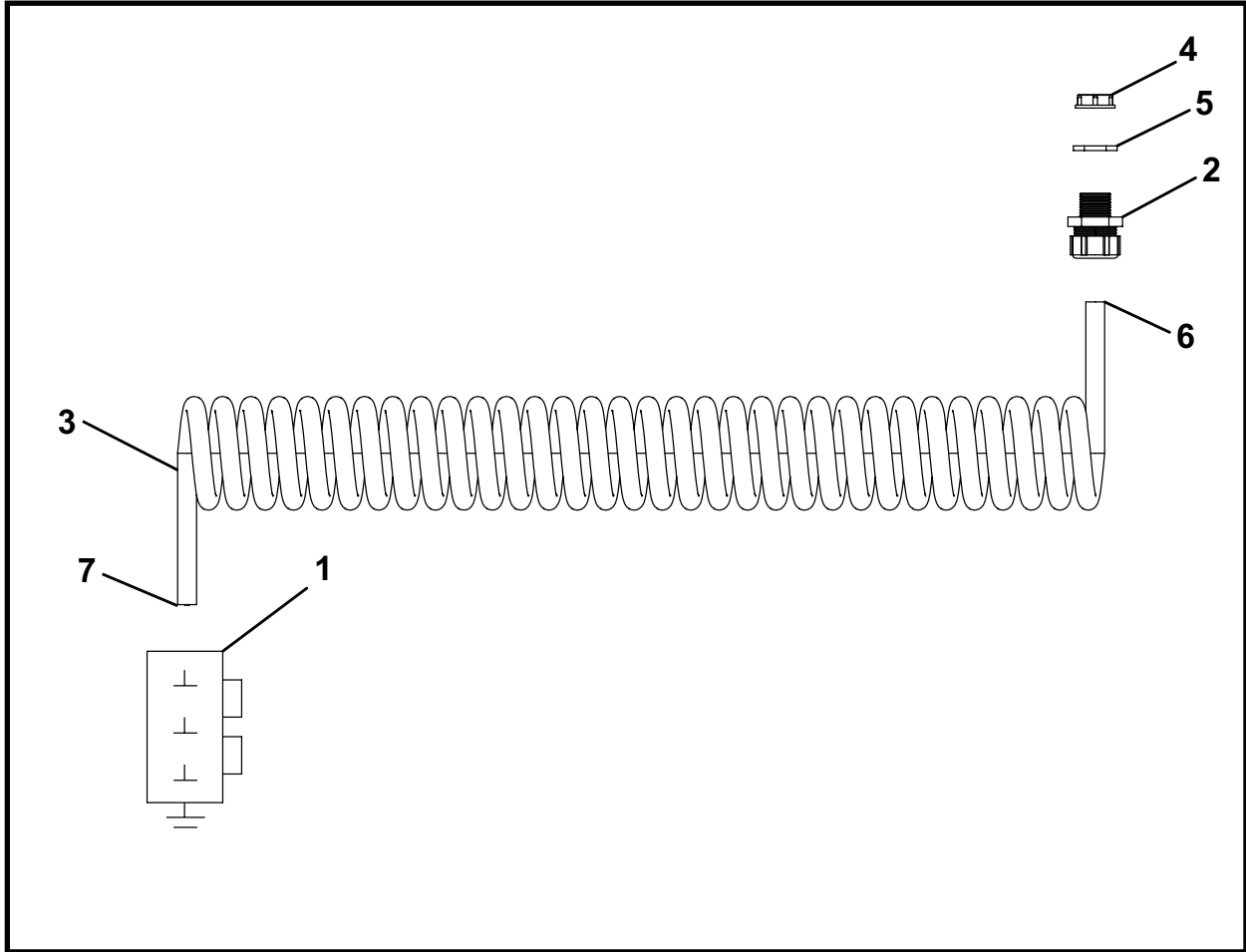
ITEM	QTY	PART NO.	DESCRIPTION
1	1	P0032-912	CONTROL, Joystick
2	1	061258A	MOUNT, Joystick
3	2	P0001-04-004	BOLT, Hex 1/4 x 1
4	2	P0003-04-000	NUT, Hex 1/4 UNC
5	2	P0040-004	WASHER, Flat 1/4

INCHING CONTROL
SN F21700F-28 & BEFORE



ITEM	QTY	PART NO.	DESCRIPTION
1	1	P0251-392	SWITCH, Inching Control

**INCHING CONTROL
SN F21700F-29 & AFTER**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	021660A	ASSEMBLY, Inching Control
1	1	P0056-160	PENDANT, Station, In/Out
2	1	P0311-051	RELIEF, Strain 5/8"
3	1	P0082-004	CABLE, Coiled
4	1	P0311-032	BUSHING, 1/2"
5	1	P0311-018	NUT, Lock 1/2"
6	3	P0055-238	INSULATOR, Male 1/4
7	5	P0055-001	STUD, Ring Terminal #6

NOTES

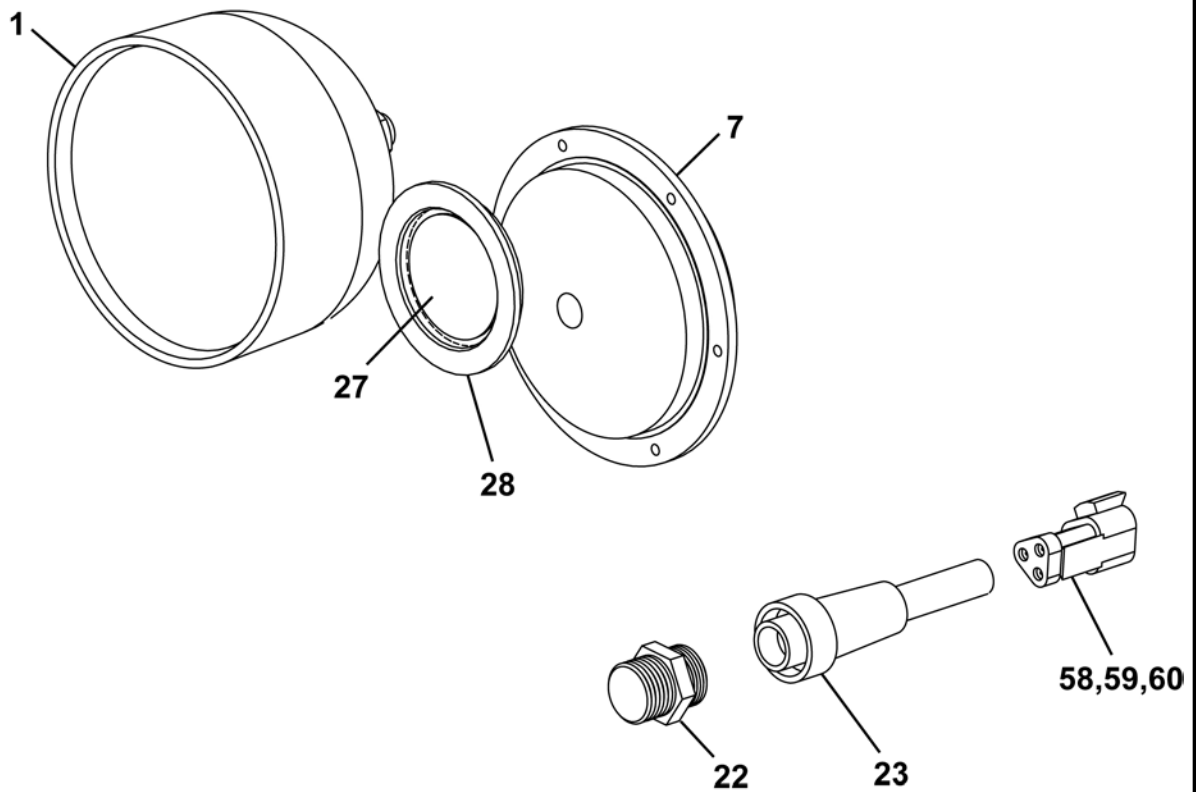


Electrical

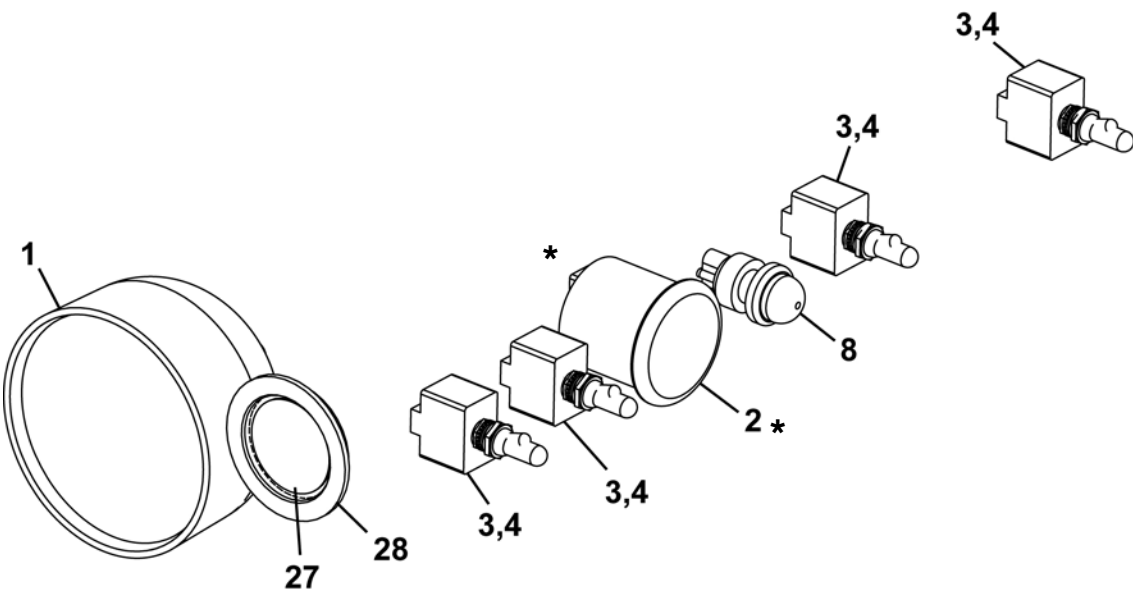
Electrical Assembly (SN21700F11 & Before), 021781A	2
Electrical Schematic	6
Electrical Assembly (SN21700F12 thru 28), 021781A	8
Electrical Schematic	12
Electrical Assembly (SN21700F29 & After), 061275A	14
Electrical Schematic	18
Battery Pack, 48 Volt DC, P0064-010	19
Battery Charger, 48 Volt DC, F0310-714/F0310-222	20
Battery Charger, 48 Volt DC, F0310-1003/F0310-1004	21

ELECTRICAL ASSEMBLY, 021781A
SN F21700F-11 & BEFORE

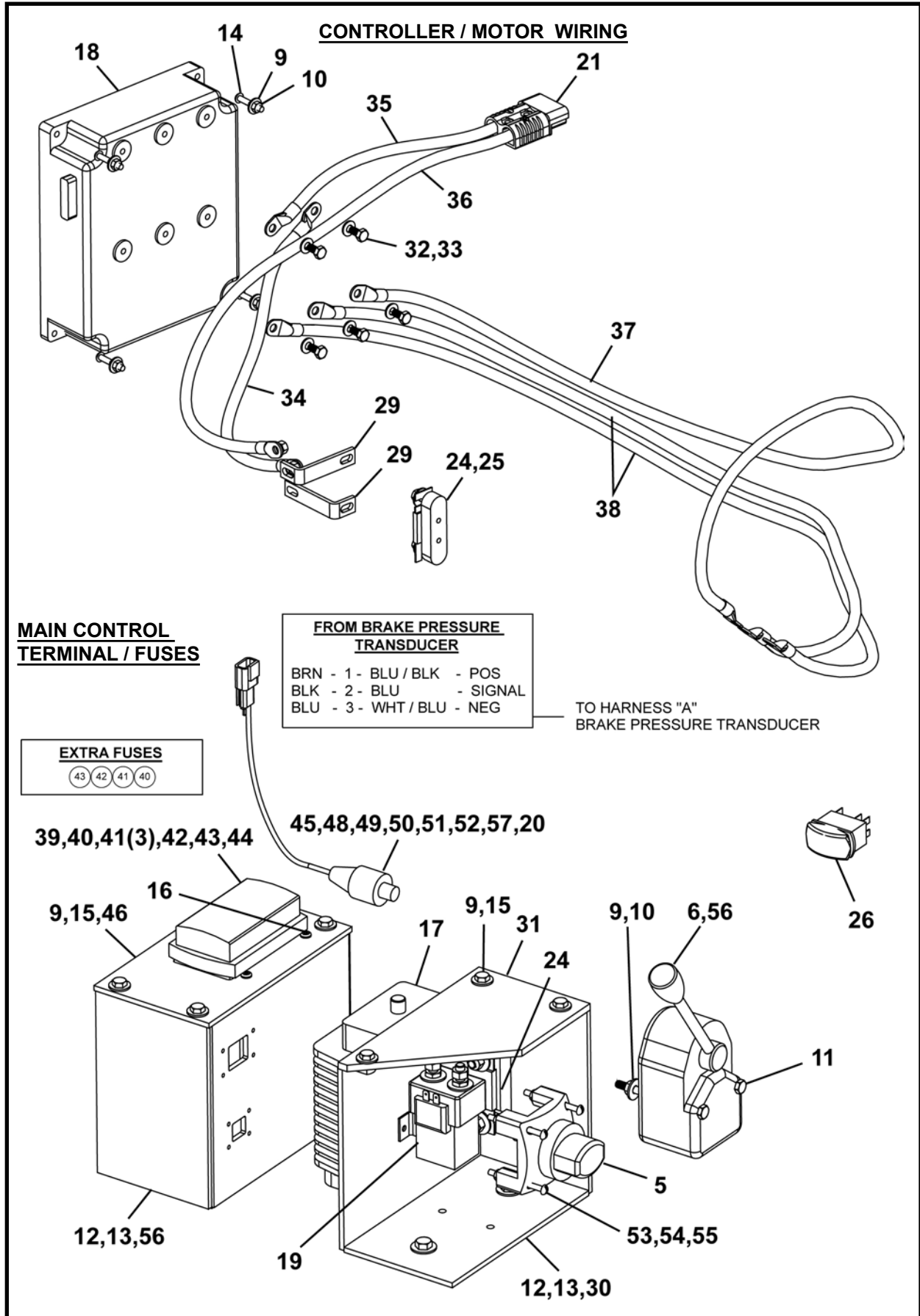
FRONT SECTION WIRING



DASH WIRING



ELECTRICAL ASSEMBLY, 021781A
SN F21700F-11 & BEFORE



ELECTRICAL ASSEMBLY, 021781A
SN F21700F-11 & BEFORE

ITEM	QTY	PART NO.	DESCRIPTION
0	1	021781A	ASSEMBLY, Electrical
1	2	P0053-028	LIGHT, 5"
2.1*	1	P0251-378	GAUGE, Battery/Hourmeter (SN F21700F-01 thru 06)
2.2	1	P0251-580	GAUGE, Battery (SN F21700F-07 & After)
3	4	P0251-373	SWITCH, Toggle
4	4	P0056-010	SWITCH - Toggle Boot
5	1	P0064-028	SWITCH, Battery
6	1	P0302-677	JOY STICK
7	1	P0251-375	HORN
8	1	P0056-001	SWITCH, With Boot
9	13	P0040-004	WASHER, Hardened Flat 1/4
10	6	P0003-04-000	NUT, Hex 1/4 UNC
11	2	P0001-04-013	BOLT, Hex 1/4 UNC x 3.5
12	4	P0001-05-002	BOLT, Hex 5\16 UNC x .5
13	4	P0040-005	WASHER, Hardened Flat, 5/16
14	4	P0020-14-207	SCREW, Truss Head 1/4 UNC x 1.5
15	7	P0001-04-002	BOLT, Hex 1/4 UNC x .5
16	4	P0017-10-324	SCREW, Machine 10-32 x .5
17	1	P0251-377	CONVERTOR, 48V to 13.5V
18**	1	P0304-323	CONTROLLER, Motor Speed
19	1	P0251-376	CONTACTOR
20	1	P0313-076A	RECEPTACLE, 2 Way
21	1	P0055-116	CONNECTOR, Gray
22	1	P0054-069	RECEPTACLE
23	1	P0054-278	CABLE, Mini Extension 12-ft.
24	1	P0251-384	FUSE HOLDER
25	1	P0251-385	FUSE 350A 48V
26	1	P0251-392	SWITCH, Inching
27	2	P0251-390	LIGHT, Flasher 2 LED Blue
28	2	P0251-391	GROMMET
29	2	022194P	BUSS BAR, Electrical
30	1	022191A	ELECTRICAL BOX
31	1	022195P	PLATE, Electrical Guard
32	5	P0046-024	WASHER
33	5	PM08A-1.25-025	SCREW, Hex Cap M8
34	1	022173A	CABLE, 13.5 Long
35	1	022172A	CABLE, 30.75 Long
36	1	022171A	CABLE, 36 Long
37	1	022170A	CABLE, 60 Long
38	2	022169A	CABLE, 52 Long
39	1	P0251-416	FUSE HOLDER
40	2	P0251-411	FUSE, 1 A DC ATC
41	4	P0251-412	FUSE, 3 A DC ATC
42	2	P0251-413	FUSE, 10 A DC ATC
43	2	P0251-414	FUSE, 20A DC ATC
44	1	P0251-417	FUSE HOLDER, Removal Tool
45	1	P0260-012	TRANSDUCER, Pressure
46	1	022164P	PLATE, Fuse Lid
47***	1	021603A	HARNES ASSEMBLY
48	1	P0313-072A	RECEPTACLE, 4 Way
49	1	P0313-074A	RECEPTACLE, 3 Way
50	1	P0313-072	RECEPTACLE, 4 Way
51	1	P0313-074	RECEPTACLE, 3 Way
52	1	P0313-076	RECEPTACLE, 2 Way

ELECTRICAL ASSEMBLY, 021781A
SN F21700F-11 & BEFORE

ITEM	QTY	PART NO.	DESCRIPTION
53	4	P0003-02-000	NUT, Hex 10-24
54	4	P0040-002	WASHER, #10
55	4	P0020-10-2411	SCREW, Truss Head 10-24 x 2.5
56	1	022166A	FUSE BOX
57	4	P0313-078	PIN, #20
58	1	P0313-070	RECEPTACLE, 3 Way
59	1	P0313-070A	RECEPTACLE, 3 Way
60	3	P0313-007	PIN, #16

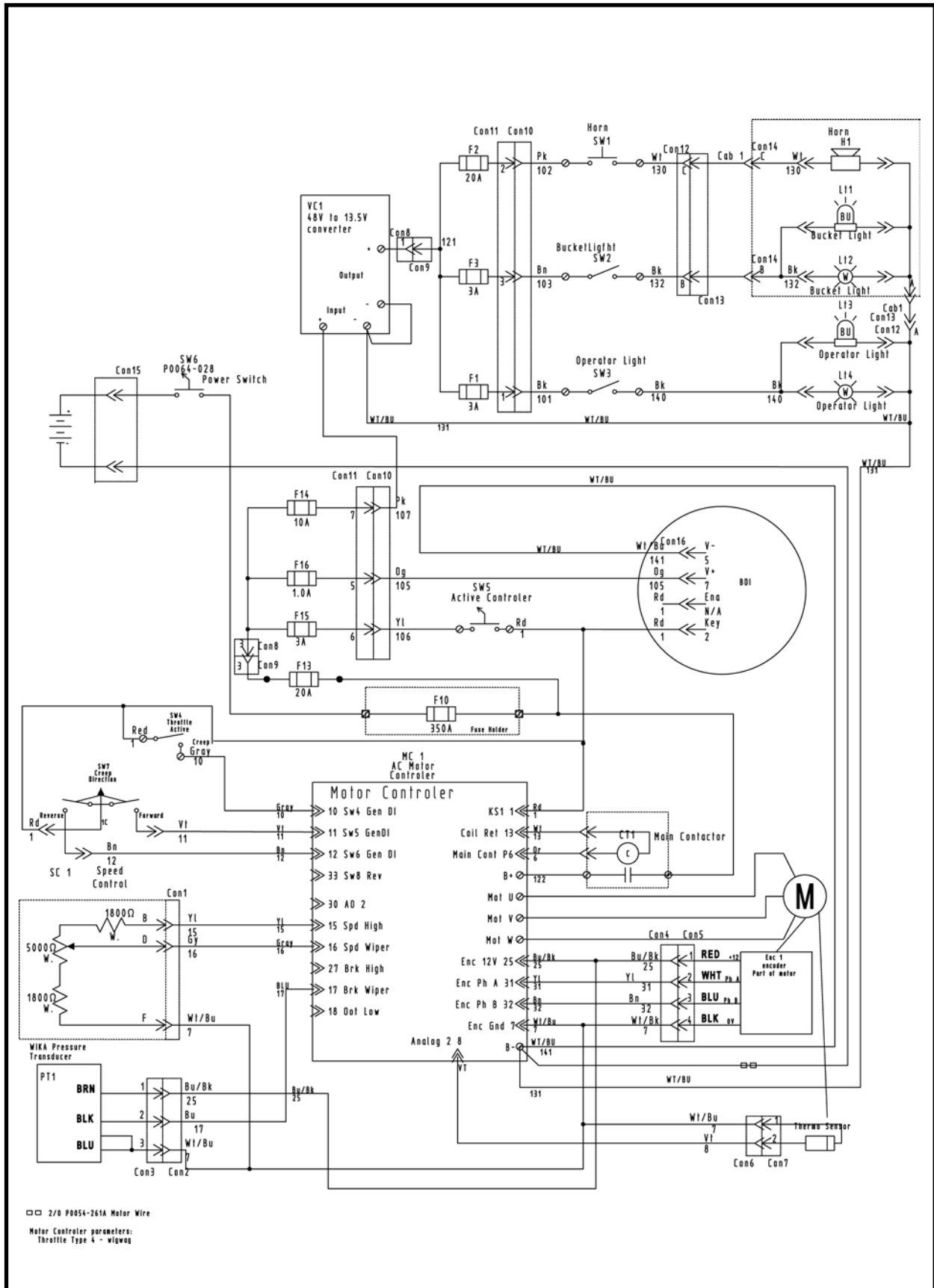
* Gauge, P0251-378 and Connector, P0251-379 are no longer available, replace with Gauge, P0251-580 and Connector P0251-581. Contact your Akkerman Aftermarket Support Representative for details on how to install the new gauge and connector to the wiring harness.

** Motor Speed Control P0304-323 is no longer available, replace with P0304-356.

*** Not Shown

NOTE: A handheld diagnostic tool is available to trouble-shoot motor controller fault codes, Akkerman part no. P0304-324A. Contact your Aftermarket Support Representative to purchase.

ELECTRICAL SCHEMATIC, 021781A SN F21700F-11 & BEFORE

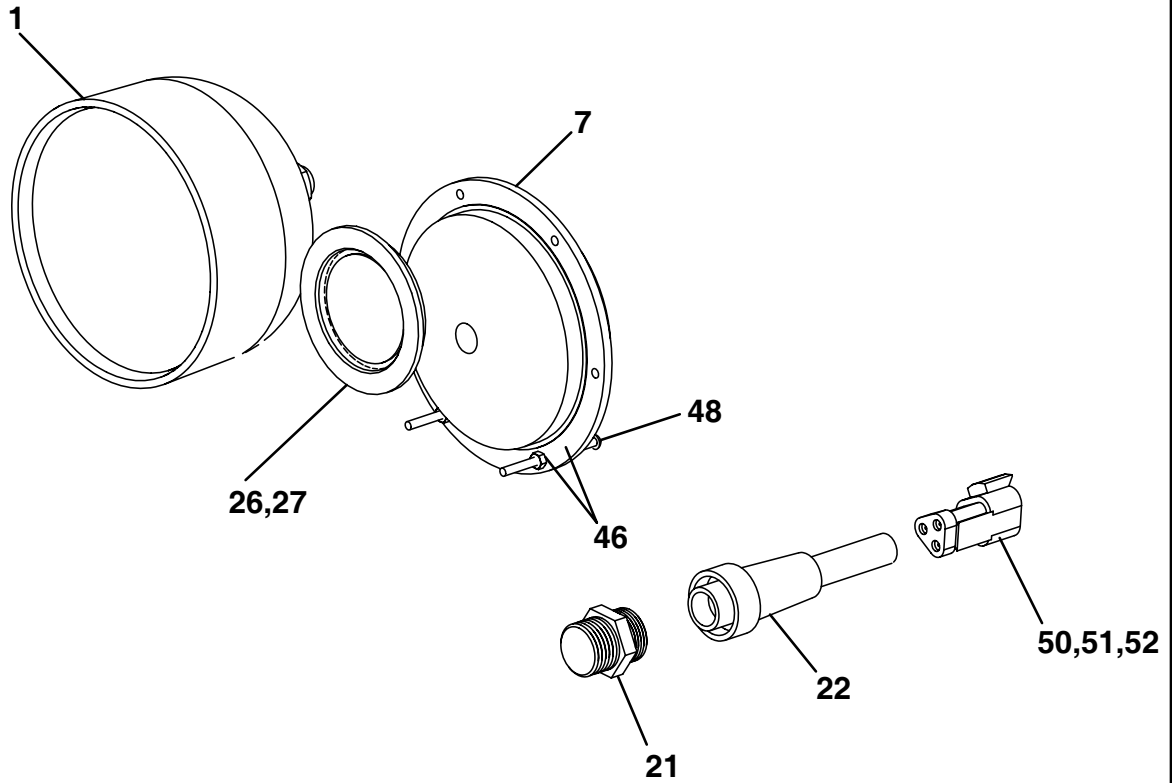


NOTES

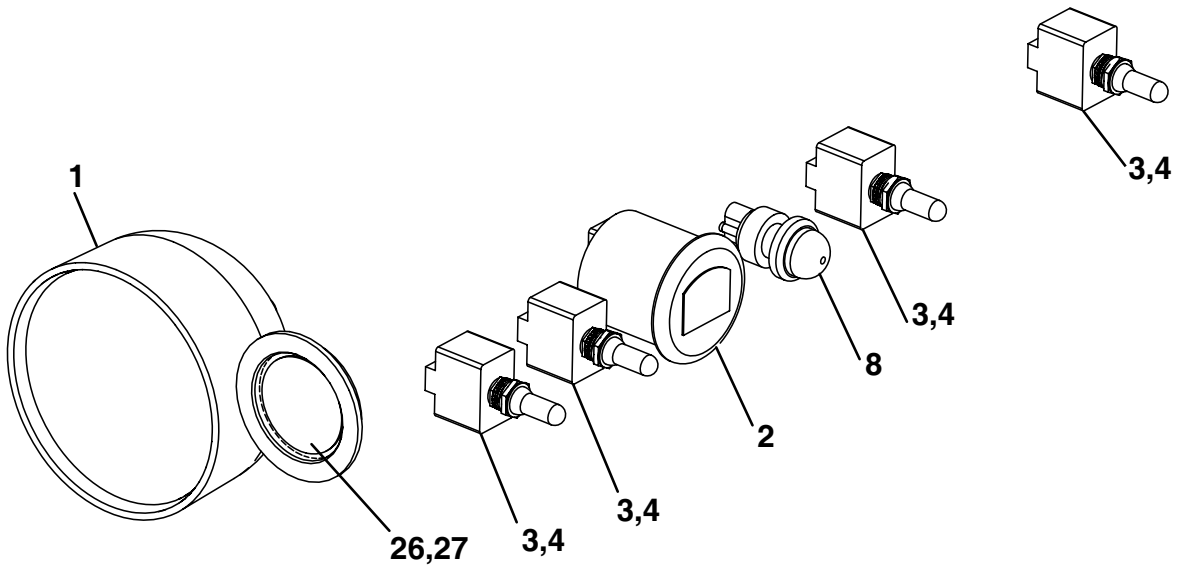
ELECTRICAL ASSEMBLY, 021781A

SN F21700F-12 THRU 28

FRONT SECTION WIRING

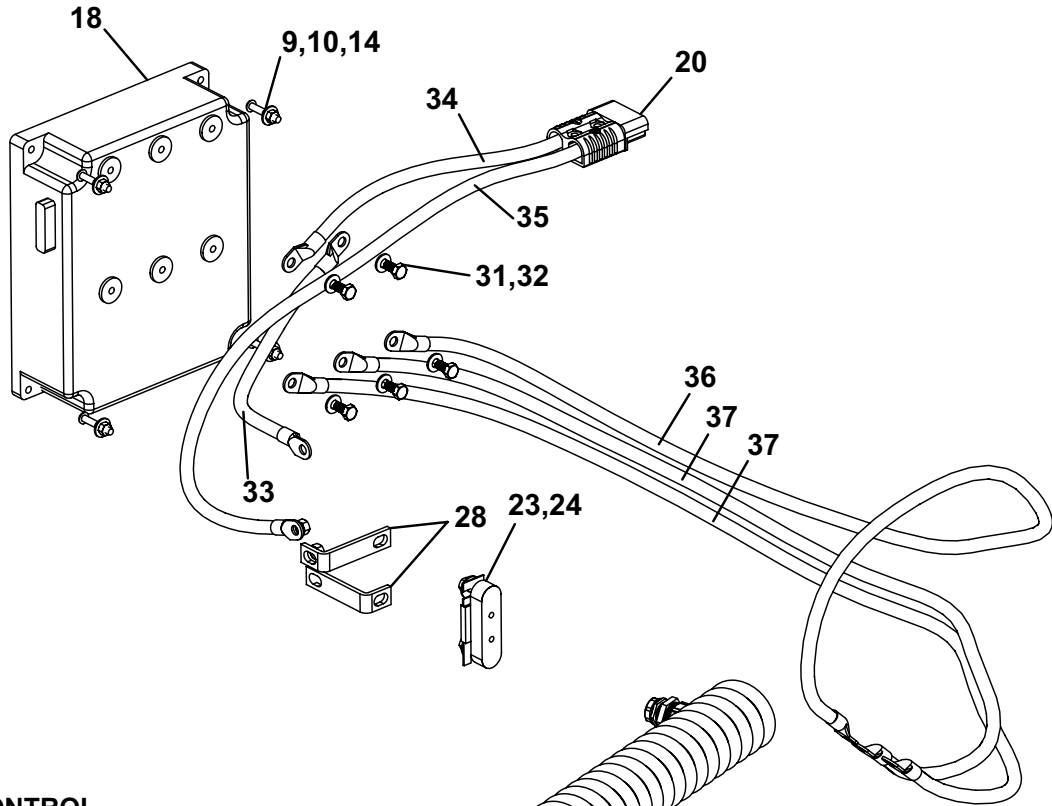


DASH WIRING

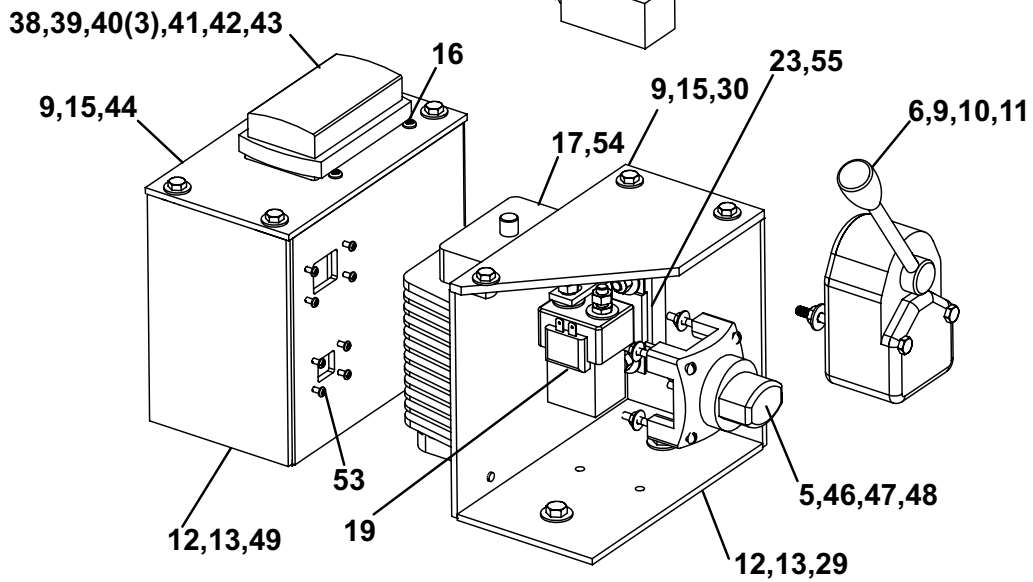
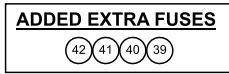


ELECTRICAL ASSEMBLY, 021781A
SN F21700F-12 THRU 28

CONTROLLER / MOTOR WIRING



**MAIN CONTROL
 TERMINAL / FUSES**



ELECTRICAL ASSEMBLY, 021781A
SN F21700F-12 THRU 28

ITEM	QTY	PART NO.	DESCRIPTION
0	1	021781A	ASSEMBLY, Electrical
1	2	P0053-028	LIGHT, 5"
2	1	P0251-580	GAUGE, Battery
3	4	P0056-147	SWITCH, Toggle
4	4	P0056-010	SWITCH - Toggle Boot
5	1	P0064-028	SWITCH, Battery
6	1	P0302-677	JOYSTICK
7	1	P0251-375	HORN
8	1	P0056-001	SWITCH, With Boot
9	13	P0040-004	WASHER, Hardened Flat 1/4
10	6	P0003-04-000	NUT, Hex 1/4 UNC
11	2	P0001-04-013	BOLT, Hex 1/4 UNC x 3.5
12	4	P0001-05-002	BOLT, Hex 5\16 UNC x .5
13	4	P0040-005	WASHER, Hardened Flat, 5/16
14	4	P0020-14-207	SCREW, Truss Head 1/4 UNC x 1.5
15	7	P0001-04-002	BOLT, Hex 1/4 UNC x .5
16	4	P0017-10-324	SCREW, Machine 10-32 x .5
17	1	P0251-377	CONVERTOR, 48V to 13.5V (Includes 17a)
17a	1	P0251-377A	FUSE
18.1*	1	P0304-323	CONTROLLER, Motor Speed (SN F21700F15 & Before)
18.2	1	P0304-356	CONTROLLER, Motor Speed (SN F21700F16 thru 28)
19	1	P0251-376	CONTACTOR
20	1	P0055-116	CONNECTOR, Gray
21	1	P0054-069	RECEPTACLE
22	1	P0054-278	CABLE, Mini Extension 12-ft.
23	1	P0251-384	FUSE HOLDER
24	1	P0251-385	FUSE 350A 48V
25	1	021660A	ASSEMBLY, Inching
26	2	P0251-390	LIGHT, Flasher 2" LED Blue
27	2	P0251-391	GROMMET
28	2	022194P	BUSS BAR, Electrical
29	1	022191A	ELECTRICAL BOX
30	1	022195P	PLATE, Electrical Guard
31	5	P0046-024	WASHER
32	5	PM08A-1.25-025	SCREW, Hex Cap M8
33	1	022173A	CABLE, 13.5 Long
34	1	022172A	CABLE, 30.75 Long
35	1	022171A	CABLE, 41.75 Long
36	1	022170A	CABLE, 60 Long
37	2	022169A	CABLE, 52 Long
38	1	P0251-416	FUSE HOLDER
39	4	P0251-411	FUSE, 1 A DC ATC
40	2	P0251-412	FUSE, 3 A DC ATC
41	2	P0251-413	FUSE, 10 A DC ATC
42	1	P0251-414	FUSE, 20A DC ATC
43	1	P0251-417	FUSE HOLDER, Removal Tool
44	1	022164P	PLATE, Fuse Lid
45**	1	021603A	HARNESS, Assembly
46	1	P0003-03-000	NUT, Hex 6/32
47	4	P0040-000	WASHER, Flat #6
48	6	P0020-63-029	SCREW, Truss Head 6/32 x 2
49	1	022166A	BOX, Fuse
50	1	P0313-070	RECEPTACLE, 3 Way

ELECTRICAL ASSEMBLY, 021781A
SN F21700F-12 THRU 28

ITEM	QTY	PART NO.	DESCRIPTION
51	1	P0054-576	CONNECTOR, Wedge 3 Pin
52	3	P0313-007	PIN, #16
53	8	P0020-63-023	SCREW, Truss Head 6-32 x .5
54	4	P0031-04-002	SCREW, Socket Head Cap 1/4 UNC x .5
55	2	P0030-04-003	SCREW, Socket Head Cap 1/4 UNC x .75

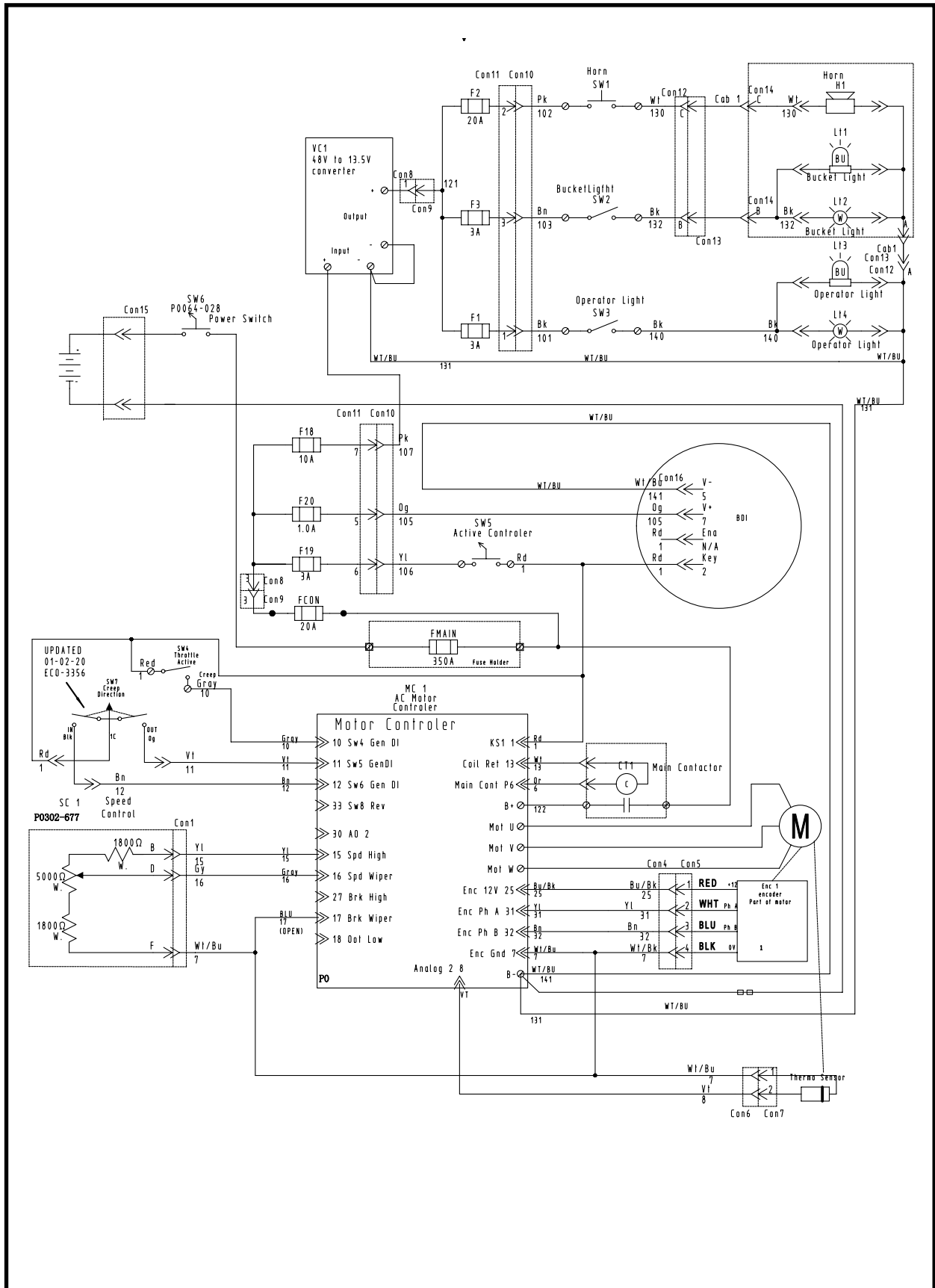
* Motor Speed Control P0304-323 is no longer available, replace with P0304-356.

** Not Shown

NOTE: A handheld diagnostic tool is available to trouble-shoot motor controller fault codes, Akkerman part no. P0304-324A. Contact your Aftermarket Support Representative to purchase.

ELECTRICAL SCHEMATIC, 021781A

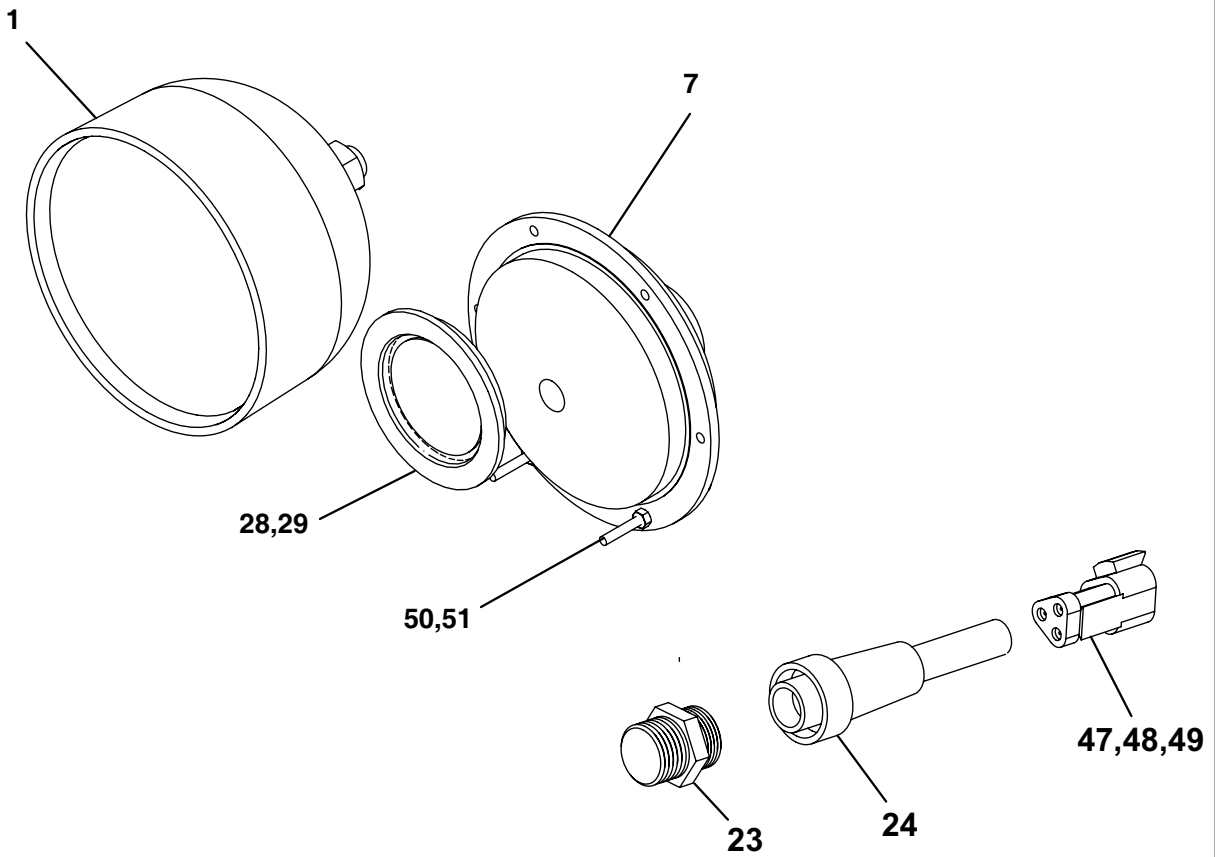
SN F21700F-12 THRU 28



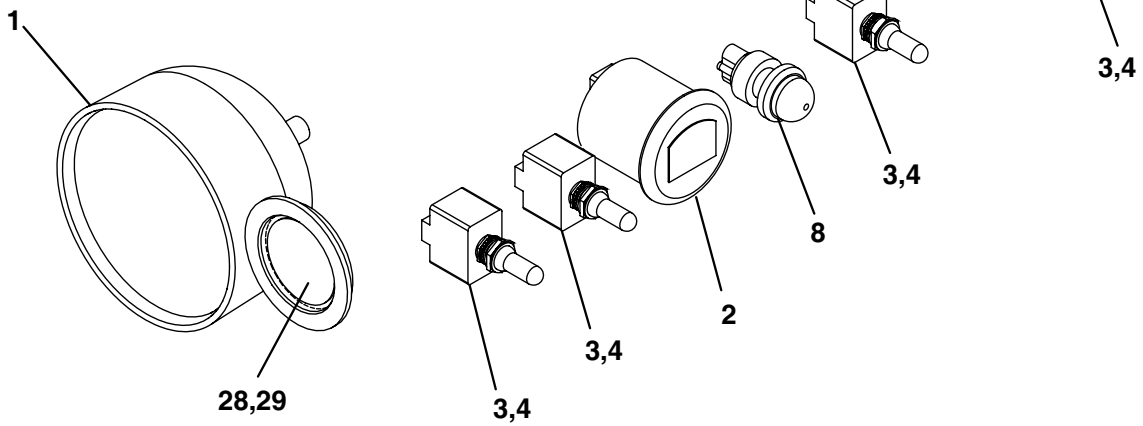
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ELECTRICAL ASSEMBLY, 061275A
SN F21700F-29 & AFTER

FRONT SECTION WIRING

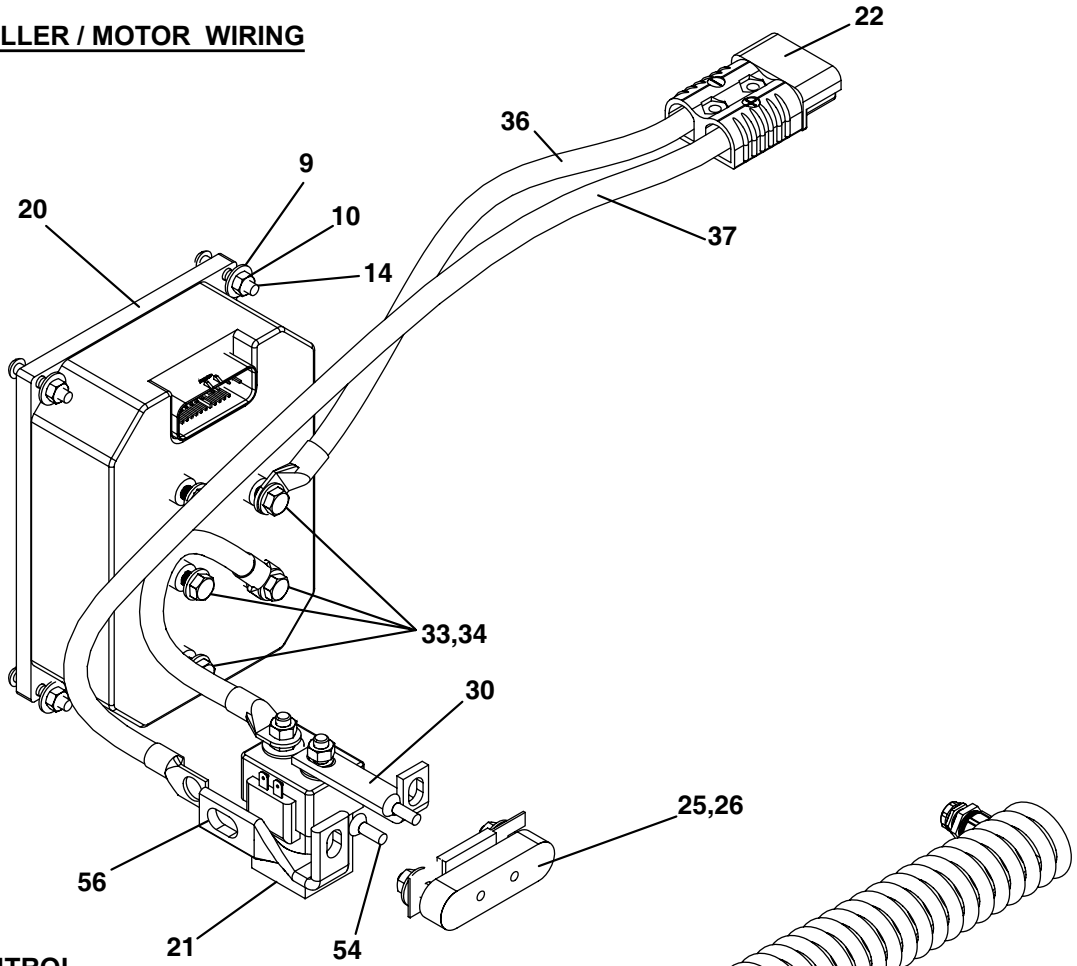


DASH WIRING

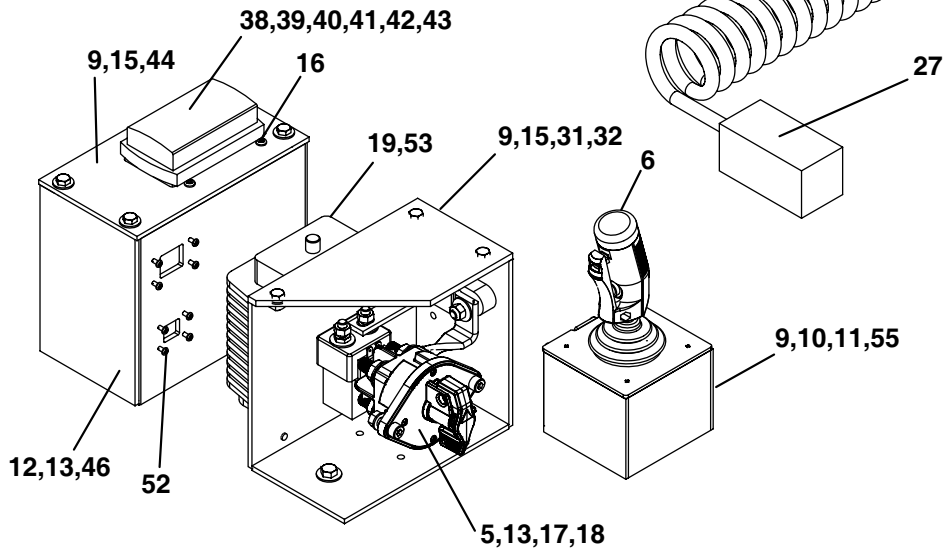


ELECTRICAL ASSEMBLY, 061275A
SN F21700F-29 & AFTER

CONTROLLER / MOTOR WIRING



**MAIN CONTROL
TERMINAL / FUSES**



ELECTRICAL ASSEMBLY, 061275A
SN F21700F-29 & AFTER

ITEM	QTY	PART NO.	DESCRIPTION
0	1	061275A	ASSEMBLY, Electrical
1	2	P0053-028	LIGHT, 5
2	1	P0251-580	GAUGE, Battery
3	4	P0056-147	SWITCH, Toggle
4	4	P0056-010	SWITCH, Toggle Boot
5	1	P0251-996	SWITCH, Battery
6	1	P0302-912	JOYSTICK
7	1	P0251-375	HORN
8	1	P0056-001	SWITCH, With Boot
9	15	P0040-004	WASHER, Hardened Flat 1/4
10	6	P0003-04-000	1/4 NC REGULAR HEX NUT
11	2	P0001-04-004	BOLT, Hex 1\4 UNC x 1 UNC
12	4	P0001-05-002	BOLT, Hex 5\16 UNC x .5
13	6	P0040-005	WASHER, Hardened Flat, 5/16
14	4	P0020-14-207	SCREW, Truss Head 1/4 UNC x 1.5
15	7	P0001-04-002	BOLT, Hex 1\4 UNC x .5
16	4	P0017-10-324	SCREW, Machine 10-32 x .5
17	2	P0003-05-000	NUT, Hex 5/16 UNC
18	2	P0031-05-004	SCREW, Socket Head Cap 5/16 UNC x 1
19	1	P0251-377	CONVERTOR, 48V TO 13.5V
20	1	P0304-367	CONTROLLER, Motor Speed
21	1	P0251-376	CONTACTOR
22	1	P0055-116	CONNECTOR, Gray
23	1	P0054-069	RECEPTACLE, 3 Pin, 16 Gauge Mini M x 10
24	1	P0054-278	CABLE, 3 Pin, 16 Guage Mini Ext. x 12-ft.
25	1	P0251-384	FUSE HOLDER, 350A 48V
26	1	P0251-385	FUSE, 350A 48V
27	1	021660A	ASSEMBLY, Creep Mode
28	2	P0251-390	LIGHT, Flasher 2 Blue
29	2	P0251-391	GROMMET, 2
30	1	022194P	BUSS BAR, Electrical
31	1	022191A	BOX, Electrical
32	1	022195P	PLATE, Electrical Guard
33	5	P0046-024	WASHER
34	5	PM08A-1.25-020	SCREW, Hex Cap 8mm x 1.25
35	1	022173A	CABLE, 13.5 Long
36	1	022172A	CABLE, 30.75 Long
37	1	061287A	CABLE, 41.75 Long
38	1	P0251-416	FUSE HOLDER
39	2	P0251-411	FUSE, 1 A DC ATC
40	4	P0251-412	FUSE, 3 A DC ATC
41	2	P0251-413	FUSE, 10 A DC ATC
42	2	P0251-414	FUSE, 20A DC ATC
43	1	P0251-417	FUSE HOLDER, Removal Tool
44	1	022164P	PLATE, Fuse Lid
45*	1	061259A	HARNES, CAN Bus Assembly
46	1	022166A	PLATE, Fuse Box
47	1	P0313-070	RECEPTACLE, 3 Way
48	1	P0054-576	CONNECTOR, Wedge 3 Pin
49	3	P0313-007	PIN, #16
50	2	P0020-63-029	SCREW, Truss Head 6-32 x 2
51	4	P0003-03-000	NUT, Hex 6-32
52	8	P0020-63-023	SCREW, Truss Head 6-32 x .5

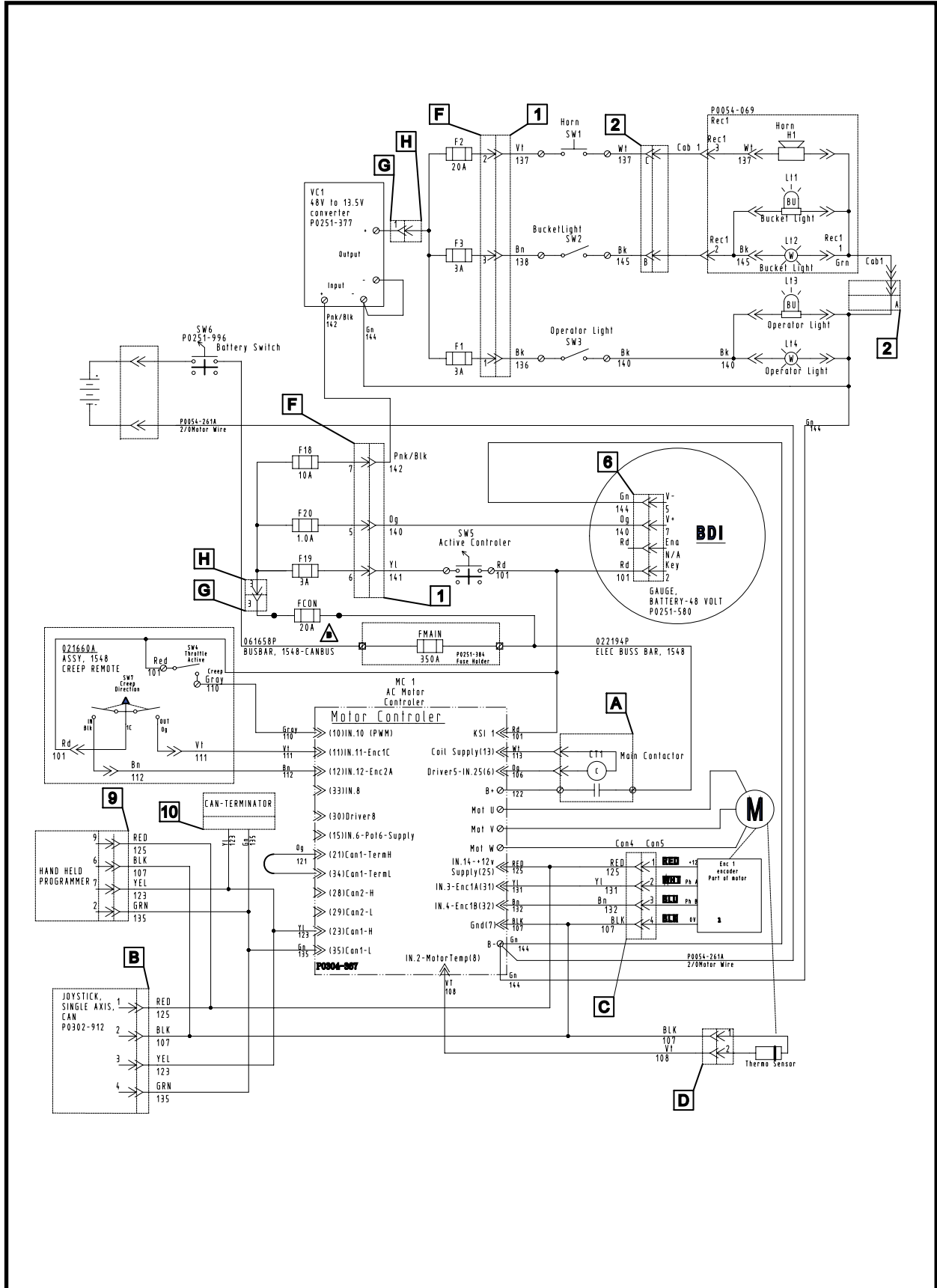
ELECTRICAL ASSEMBLY, 061275A
SN F21700F-29 & AFTER

ITEM	QTY	PART NO.	DESCRIPTION
53	4	P0031-04-002	SCREW, Socket Head Cap 1/4 UNC x .5
54	2	P0030-04-003	SCREW, Socket Head Cap 1/4 UNC x .75
55	1	061258A	MOUNT, Joystick
56	1	061659P	BUSBAR, CAN Bus

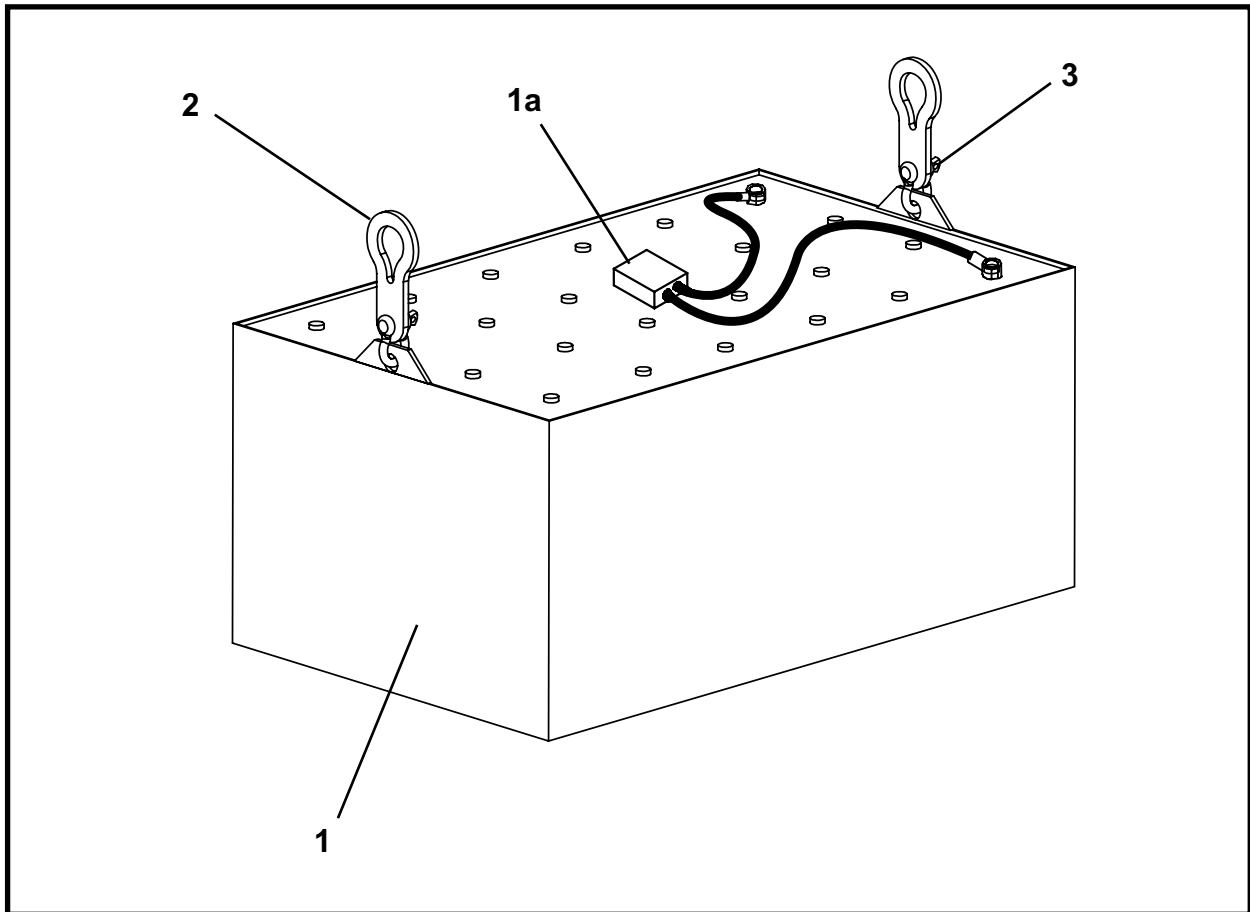
* Not Shown

NOTE: A handheld diagnostic tool is available to trouble-shoot motor controller fault codes, Akkerman part no. P0304-324A. Contact your Aftermarket Support Representative to purchase.

ELECTRICAL SCHEMATIC, 061275A SN F21700F-29 & AFTER

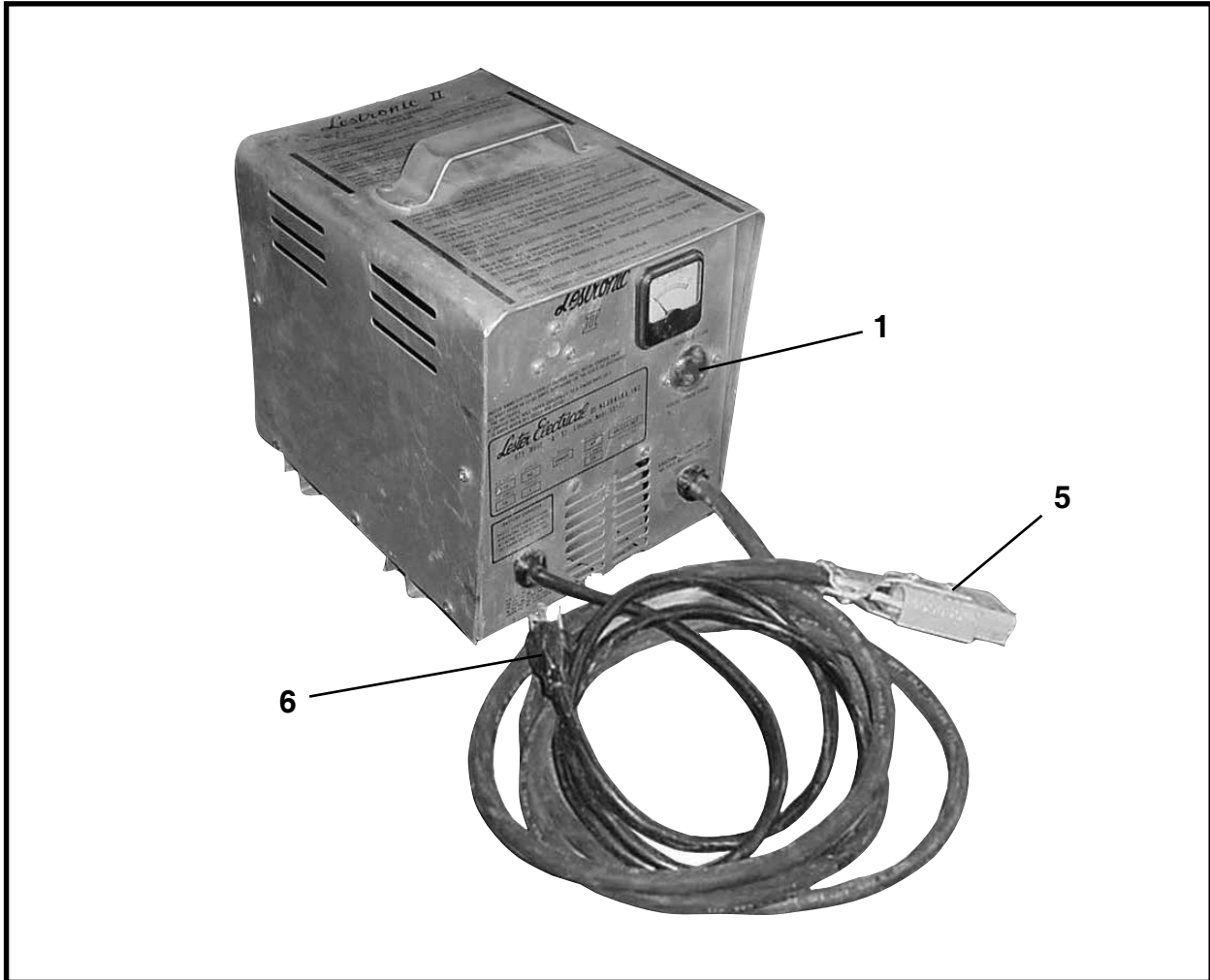


BATTERY PACK, 48 VOLT DC, F0064-010



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F0064-010	BATTERY PACK, 48 Volt DC
1	1	P0064-010	BATTERY PACK, 48Volt DC (Includes item 1a)
1a	1	P0055-116	CONNECTOR
1b	1	P0064-010A	PLUG, Vent Cap
1c	1	P0064-010B	CAP, Terminal 7 1/2"
1d	1	P0064-010C	CAP, Terminal 4 3/4"
2	2	001235P00	LIFT EYE
3	2	P0091-009	CLEVIS, 3/8 With .375 Pin

BATTERY CHARGER, 48 VOLT DC, F0310-714 / F0310-222



ITEM	QTY	PART NO.	DESCRIPTION
0.1*	1	F0310-714	BATTERY CHARGER, 48 Volt DC (230V/60 Hz)
0.2*	1	F0310-222	BATTERY CHARGER, 48 Volt DC (230V/50 Hz)
1	1	P0310-714B	FUSE ASSEMBLY, 25 Amp
2*	1	P0310-714D	AMP METER
3*	1	P0310-714C	KIT, Timer
4*	1	P0310-714E	RELAY
5	1	P0055-116	CONNECTOR
6	1	P0251-359	CONNECTOR, Male Replacement
7**	1	P0310-714A	CONNECTOR, Female Replacement (Used for extension cord)

* Battery Chargers F0310-714 and F0310-222 are no longer available. Replace with Battery Chargers F0310-1003 or F0310-1004. Contact your Akkerman Aftermarket Support Representative for details on how to install the new gauge and connector to the wiring harness.

** Not Shown

BATTERY CHARGER, 48 VOLT DC, F0310-1003 / F0310-1004



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	F0310-1003	BATTERY CHARGER, 48 Volt DC (230V/60 Hz)
0.2*	1	F0310-1004	BATTERY CHARGER, 48 Volt DC (230V/50 Hz)
1	1	P0055-116	CONNECTOR

* Not Shown

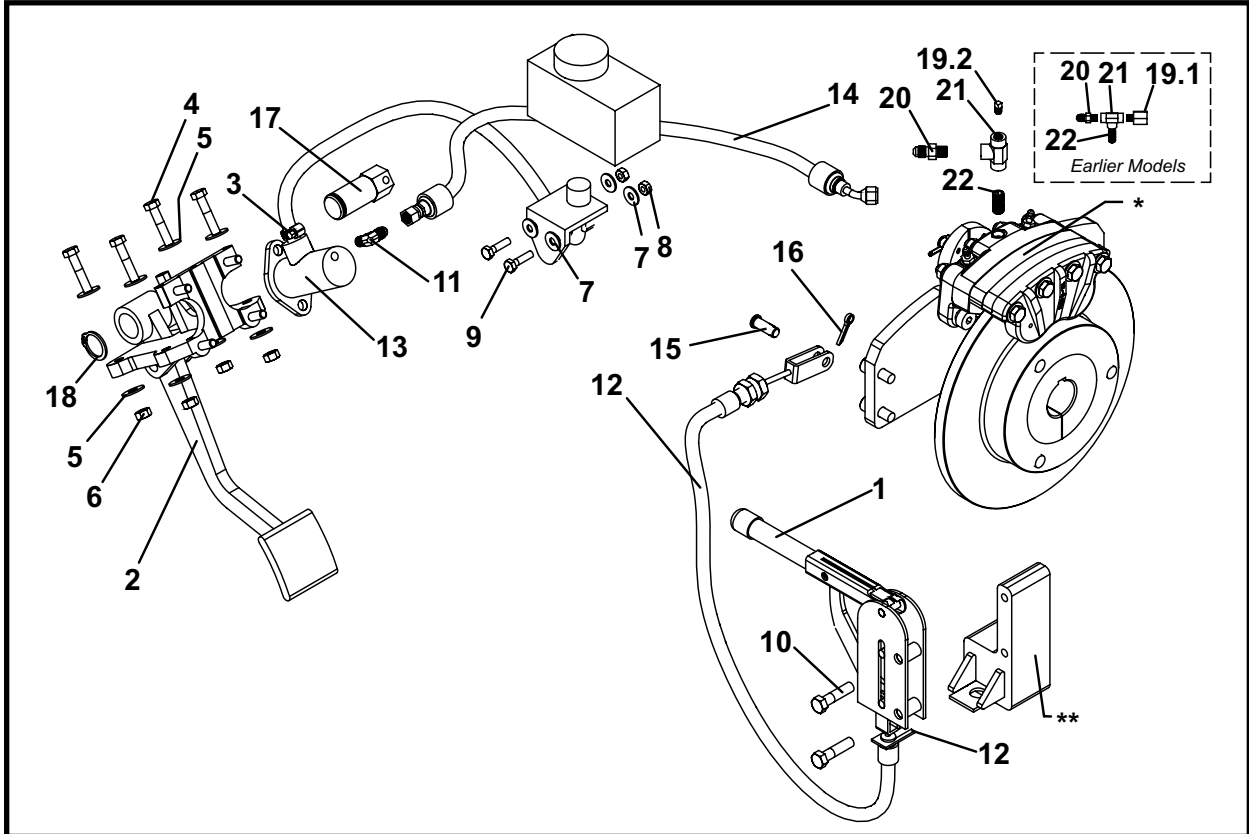
NOTES



Hydraulics

Brake Assembly, 021778A 2

BRAKE ASSEMBLY, 021778A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	021778A	BRAKE ASSEMBLY
1	1	P0102-110	HANDLE
2	1	P0115-015	PEDAL, Brake
3	2	P0201-293	CLAMP, Radiator
4	4	P0001-05-006	BOLT, Hex 5/16 UNC x 2.25
5	4	P0040-005	WASHER, Hardened Flat 5/16
6	4	P0003-05-000	NUT, 5/16
7	2	P0040-004	WASHER, Hardened Flat 1/4
8	2	P0003-04-000	NUT, 1/4
9	2	P0001-04-004	BOLT, Hex 1/4 UNC x 1
10	2	P0001-06-006	BOLT, Hex 3/8 UNC x 1.5
11	2	P0300-418	FITTING, 04MJ-02MP90-FGD
12	1	P0102-111	CABLE, Brake
13	1	P0115-014	KIT, Master Cylinder (Includes items 13a - 13c)
13a	1	-	Master Cylinder
13b	1	-	Bracket
13c***	1	-	Reservoir
14	1	A10404A-026	ASSEMBLY, Hose 1/4 x 26
15	1	P0024-004	PIN, Clevis
16	1	P0048-032	PIN, Cotter
17	1	022112P	PIN, Brake Pivot
18	1	P0077-011	SNAP RING
19.1	1	P0300-760	FITTING, 02MP-04FP (Earlier Models)
19.2	1	P0416-000	PLUG, 1/8 Square Head (Later Models)
20	1	P0300-363	FITTING, 04MJ-02MP
21	1	P0300-226	FITTING, 02FP-02FP-02FP
22	1	P0402-000	NIPPLE, Close 1/8

* Reference P0115-012 Brake Caliper; see Drive Assembly, 021799A in this section.

** Reference 022101A Brake Mount

*** Use DOT 3 Brake Fluid, P0126-051



Valves

Does not apply to this system

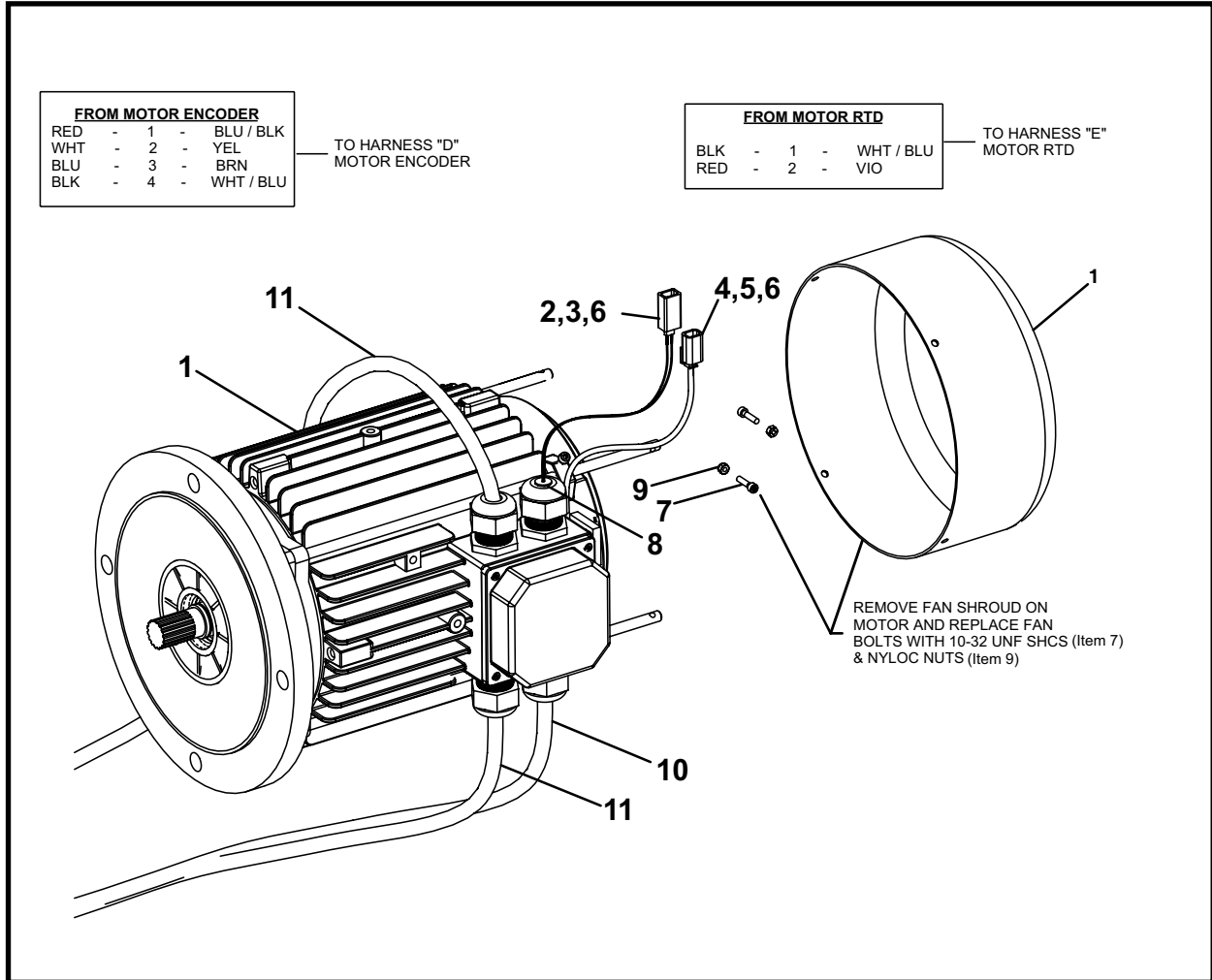
NOTES



Motors

Drive Motor Assembly, 021190A 2

DRIVE MOTOR ASSEMBLY, 021190A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	021190A	DRIVE MOTOR ASSEMBLY
1	1	P0304-322	MOTOR
2	1	P0313-076	RECEPTACLE, 2 Way
3	1	P0313-076A	RECEPTACLE, Wedglock, 2 Way
4	1	P0313-072	RECEPTACLE, 4 Way
5	1	P0313-072A	RECEPTACLE, Wedglock, 4 Way
6	6	P0313-078	PIN
7	2	P0031-02-003A	SCREW, Socket Head Cap 10-32 x .75
8	1	007064P	CORD GRIP, Wire
9	2	P0013-10.32-000	NUT, Nyloc 10-32
10	2	022169A	CABLE, 52 Long
11	1	022170A	CABLE, 60 Long



Pumps

Does not apply to this system

NOTES



Cylinders

Does not apply to this system

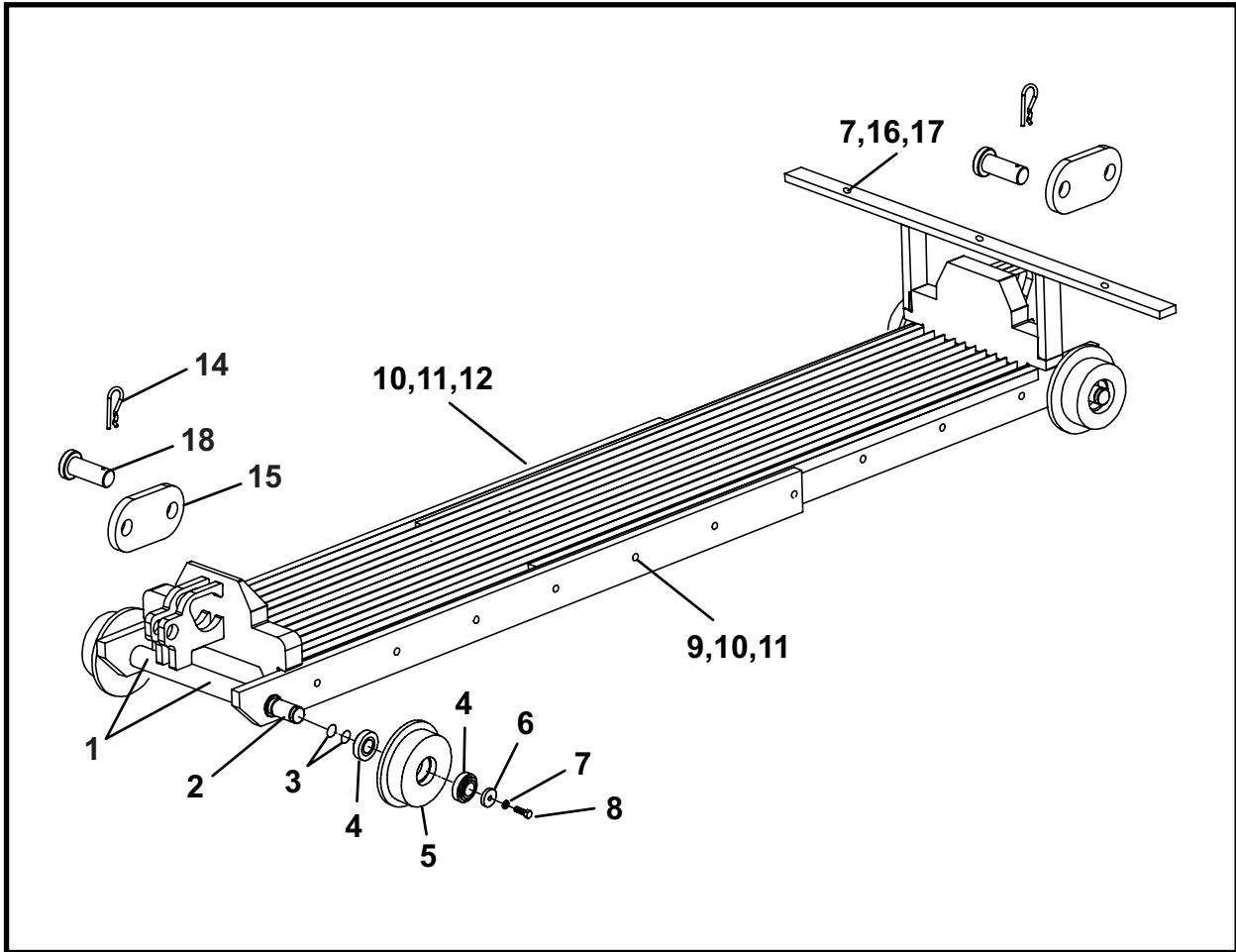
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Miscellaneous

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Haul Cart, 20 Gage, F27521F	3
Inspection Cart, 20 Gage, 032925A	4
Inspection Cart, 24 Gage, 032900A	5

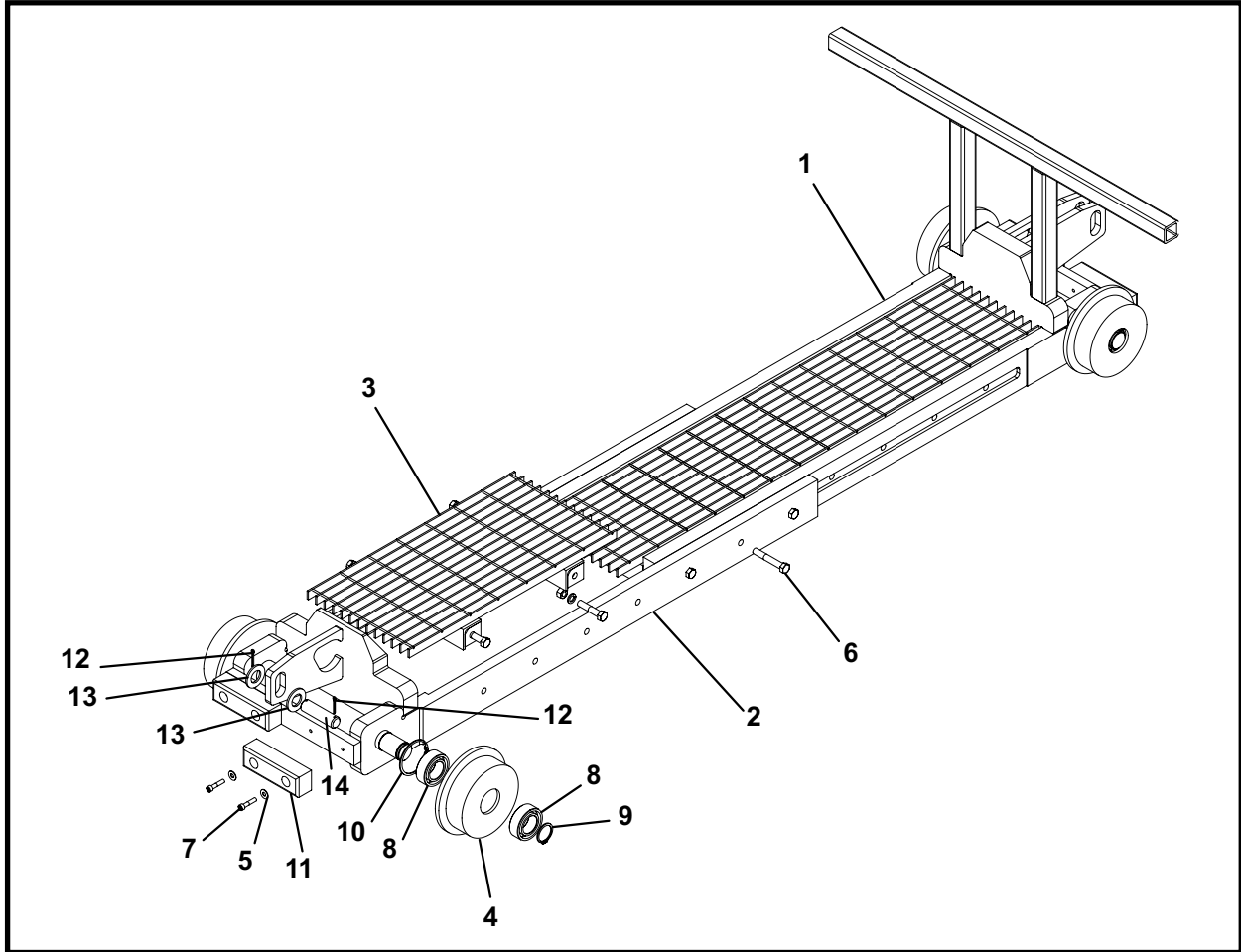
**HAUL CART, F11266F00
(20 GAGE)**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F11266F00	HAUL CART, 20 Gage
1	4	P0063-001	FITTING, Grease 1/4 UNF
2	2	011264P00	ROD, Drive
3	8	P0085-028	O-RING
4	8	P0065-004	BEARING
5	4	007677P00	WHEEL, Drive
6	4	005069P00	WASHER
7	9	P0045-008	WASHER, Lock 1/2
8	4	P0001-08-005	BOLT, 1/2 UNC x 1.25
9	6	P0001-10-014	BOLT, Hex 5/8 UNC x 3.50
10	14	P0046-010	WASHER, Hi-Collar Lock, 5/8
11	14	P0003-10-000	NUT, 5/8
12	6	P0001-10-011	BOLT, Hex 5/8 UNC x 2.75
13*	4	P0033-08-016	SCREW, Set 1/2 UNC x 1
14	2	P0090-004	PIN CLIP, 3/16
15	2	011488P00	LINK, Haul Cart Hitch
16	3	P0001-08-010	BOLT, Hex 1/2 UNC x 2.5
17	3	P0003-08-000	NUT, 1/2
18	2	011489P00	PIN, Hitch

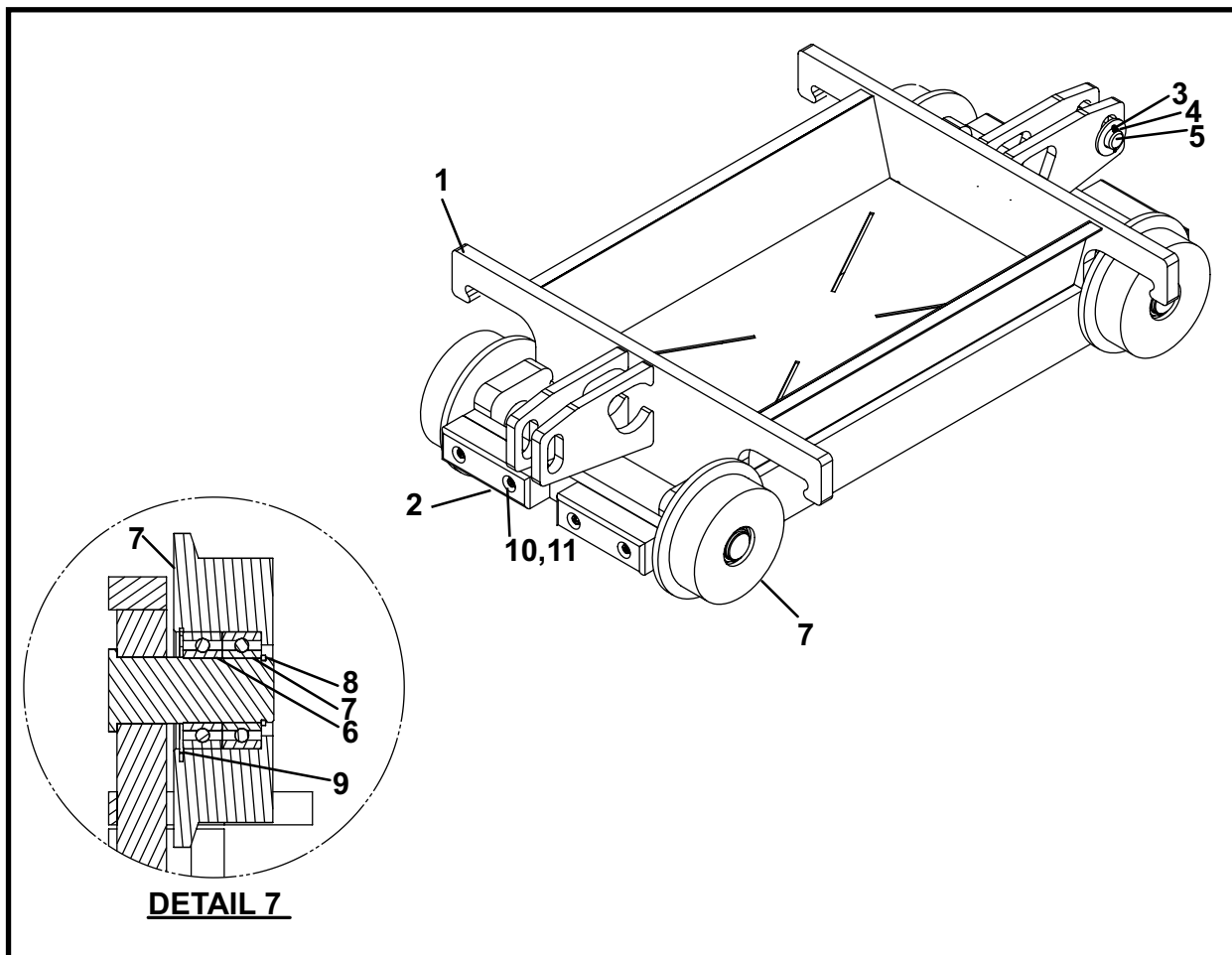
* Not Shown

**HAUL CART, F27521F
(20 GAGE)**



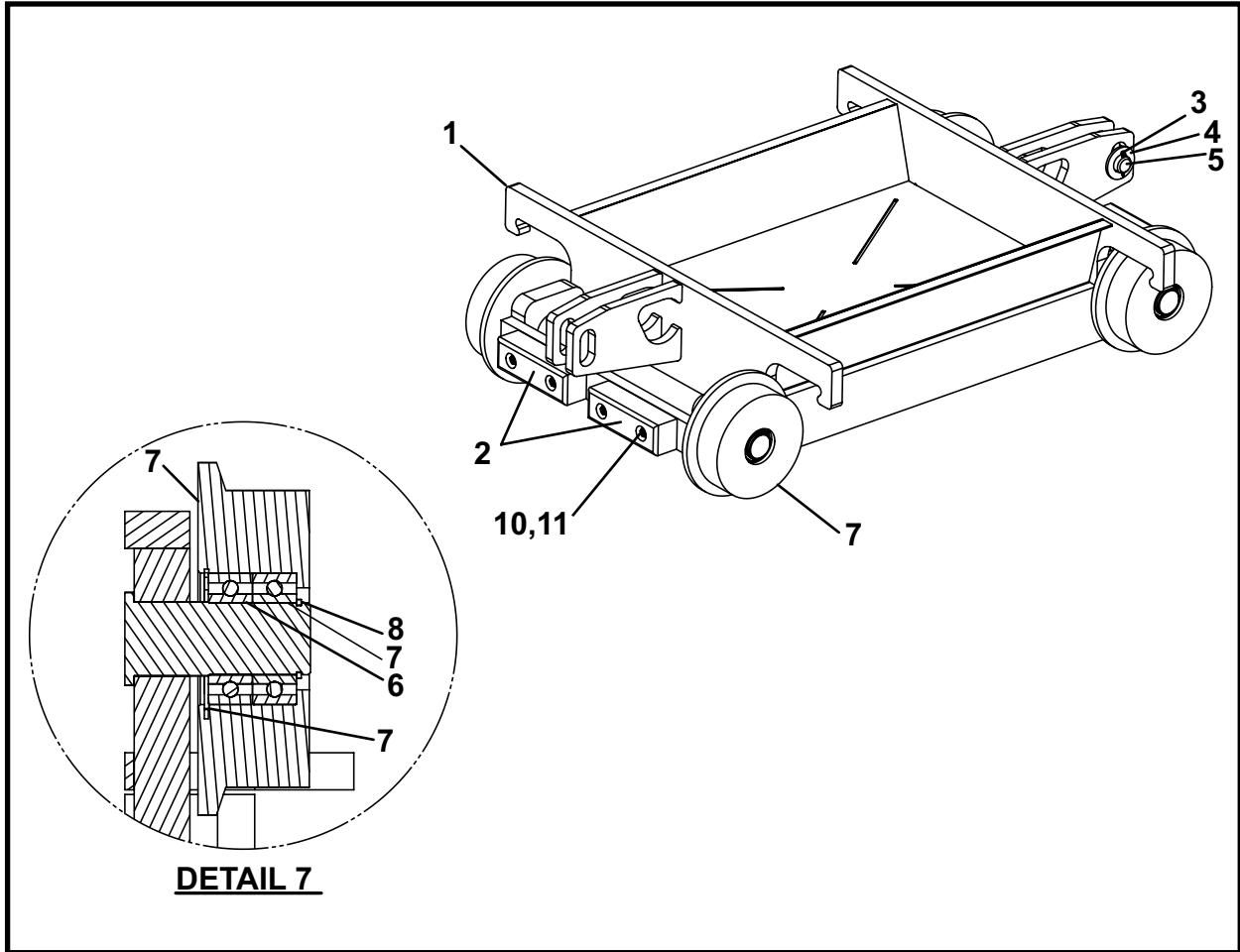
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F27521F00	HAUL CART, 20 Gage
1	1	027160A	RAIL, Front
2	1	027161A	RAIL, Back
3	1	021779A	EXTENSION, Front
4	4	021711P	WHEEL, Idler
5	4	P0040-006	WASHER, 3/8 Hardened Flat
6	6	P0001-10-016	BOLT, Hex 5/8 UNC x 4
7	4	P0031-06-007	SCREW, Socket Head Cap 3/8 UNC x 1.75
8	8	P0065-005	BEARING
9	4	P0077-054	SNAP RING, External
10	4	P0077-055	SNAP RING, Internal
11	4	P0253-133	GUARDS, Rubber
12	2	P0048-035	PIN, Cotter 5/32 x 1.5
13	2	P0040-020	WASHER, 1-1/4 Hardened
14	1	027171P	PIN, 1-1/4 x 4.5

**INSPECTION CART, 032925A
(20 GAGE)**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	032925A	INSPECTION CART, 20 Gage
1	1	032924A	WELDMENT, Assembly
2	4	P0253-133	GUARDS, Rubber
3	2	P0048-035	PIN, Cotter 5/32 x 1.5
4	2	P0040-020	WASHER, 1 1/4 Hardended
5	1	027171P	PIN, 1 1/4 x 4.5
6	8	P0065-005	BEARING
7	4	021711P	WHEEL, Idler
8	4	P0077-054	SNAP RING, External HD
9	4	P0077-055	SNAP RING, Internal
10	8	P0031-06-007	SCREW, Socket Head Cap 3/8 UNC x 1.75
11	8	P0040-006	WASHER, 3/8 Hardended Flat

**INSPECTION CART, 032900A
(24 GAGE)**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	032900A	INSPECTION CART, 24 Gage
1	1	032901A	WELDMENT, Assembly
2	4	P0253-133	GUARDS, Rubber
3	2	P0048-035	PIN, Cotter 5/32 x 1.5
4	2	P0040-020	WASHER, 1-1/4 Hardended
5	1	027171P	PIN, 1-1/4 x 4.5
6	8	P0031-06-007	SCREW, Socket Head Cap 3/8 UNC x 1.75
7	8	P0040-006	WASHER, 3/8 Hardended Flat
8	8	P0065-005	Bearing
9	4	021711P	WHEEL, Idler
10	4	P0077-054	SNAP RING, External HD
11	4	P0077-055	SNAP RING, Internal

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