

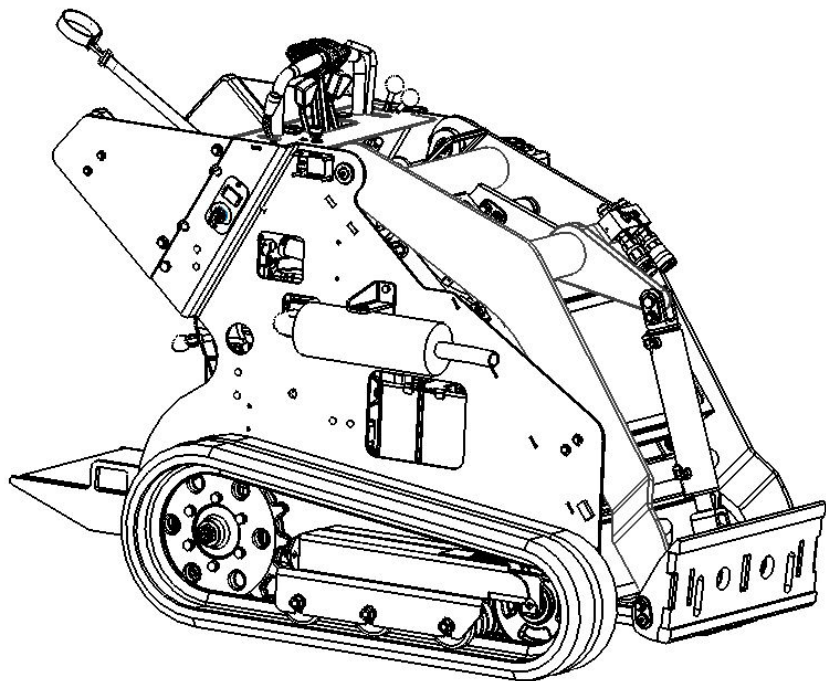
BOXER[®]

BOXEREQUIPMENT.COM

BOXER 385D

COMPACT TOOL CARRIER

PARTS MANUAL



Serial Numbers: 385D0010621- Current



RAYCO

RAYCO MANUFACTURING LLC © 2022

4255 E LINCOLN WAY

WOOSTER, OHIO 44606 U.S.A.

800.392.2686

ALL RIGHTS RESERVED PRINTED IN USA

INDEX: OSM385DCE-22

Serial Number Location & Information

Your machine's Model, Weight, and Power Rating along with Serial Number and Date of Manufacture of your machine are located on the right side panel at the top.

The Engine information is located on a decal on your engine. Refer to your Engine OEM Manual for decal location.



Serial Number Location

Serial Number Location & Information

Track Loader = Type of Rayco Equipment

001= The three digit number of produced

Boxer 385DCE = Model of Rayco Equipment

Production Date; 01 = 2 digit month; 20 = 2 digit year

Machine Type:	TRACK LOADER
Model:	BOXER 385D
Serial Number:	385D 0010121
Power Rating:	24.8HP (18.49kw)
GVW/Mass:	1920/947(kg)
Electrical Dwg:	43028
Year of Mfg:	2021

RAYCO.
 WWW.RAYCOMFG.COM

Rayco Manufacturing Inc.
 4255 East Lincoln Way, Wooster, OH 44691 USA

Always have a record of the model numbers and serial numbers for your machine to specify when ordering parts. Record your machine model and serial numbers below for your personal records.

Identification Numbers

	Model Number	Serial Number
Machine		
Engine		
Implement		
Implement		

Dealer Information

Name			
Address			
	Dealer Contact	Phone Number	Hours
Sales			
Parts			
Service			

Safety

Certified Engine Maintenance

Proper maintenance and repair is essential to keep the engine and machine systems operating correctly. As the heavy duty off-road engine owner, you are responsible for the required maintenance listed in the Engine Owner Manual & Machine Operator, Maintenance & Service Manual.

Attach a "Do Not Operate" warning tag or a similar warning tag to the start switch or to the controls before you service the equipment or before you repair the equipment.

Know the width of your equipment in order to maintain proper clearance with you operate the equipment near fences or near boundary obstacles.

Be aware of high voltage power lines and power cables that are buried. If the machine comes in contact with these hazards, serious injury or death may occur from electrocution.

Wear a hard hat, protective glasses, and other protective equipment, as required.

Do not wear loose clothing or jewelry that can snag on controls or on other parts of the equipment.

Make sure that all protective guards and all covers are secured in place on the equipment.

Keep the equipment free from foreign material. Remove debris, oil, tools, and other items from the deck, from walkways, and from steps.

Secure all loose items such as lunch boxes, tools, and other items that are not a part of the equipment.

Know the appropriate work site hand signals and the personnel that are authorized to give the hand signals. Accept hand signals from one person only.

Do not smoke when you service an air conditioner. Also, do not smoke if refrigerant gas may be present. Inhaling the fumes that are released from a flame that contact air conditioner refrigerant can cause bodily harm or death. Inhaling gas from air conditioner refrigerant through a lighted cigarette can cause bodily harm or death.

Never put maintenance fluids into glass containers. Drain all liquids into a suitable container.

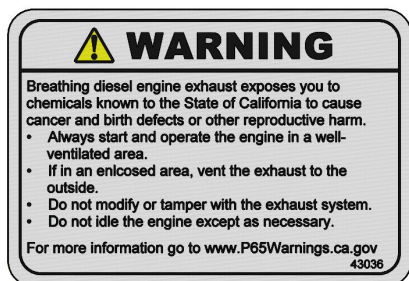
Obey all local regulations for the disposal of liquids.

Use all cleaning solutions with care. Report all necessary repairs.

Do not allow unauthorized personnel on the equipment.

Unless you are instructed otherwise, perform maintenance with the equipment in the servicing position. Refer to Operation and Maintenance Manual for the procedure for placing the equipment in the servicing position.

When you perform maintenance above ground level, use appropriate devices such as ladders or man lift machines. If equipped, use the machine anchorage points and use approved fall arrest harnesses and lanyards.



Foreword

Literature Information

The operators manual should be stored in the operator's compartment in the literature holder storage area. Rayco provides a binder to hold the Operator Service Manual, Parts Manual, Engine Manual along with other component manuals.

These manuals contain safety information, operation instruction, transportation information, lubrication information and maintenance information. This helps to ensure the best possible performance and service of the machine. Read and understand all instructions before attempting to operate this machine. This manual should be readily available for reference at all times. If this manual is lost, damaged or unreadable a new manual must be replaced. Contact Rayco Mfg LLC for a replacement manual.

Some photographs or illustrations in the publication show details of attachments that can be different from your machine. Guards and covers might have been removed for illustrative purposes. Continuing improvement may have caused changes to your machine which may not be included in this publication.

Continuing improvement and advancement of product design might have caused changes to your machine which are not included in this publication. Read, study and keep this manual with the machine.

Whenever a question arises regarding your machine, of this publication, please consult your Rayco dealer for the latest available information.

This Rayco machine was designed and manufactured by Rayco Mfg LLC, Wooster, Ohio. Due to continuous improvements, Rayco reserves the right to make changes in engineering, design and specifications, or discontinue manufacture, at any time, without notice or obligation.

Always have a record of the model and serial numbers for your machine to specify when ordering parts.

Safety

The safety section lists basic safety precautions. In addition, this section may include text and locations of warning signs and labels used on the machine.

Read and understand the basic precautions listed in the safety section before operating or performing lubrication, maintenance and repair on this machine.

Parts

Parts are readily found through illustrations with accompanying Rayco part numbers. The machine assembly is listed by basic groups to enable ease of finding parts.

Please consult your local Rayco Dealer or local Engine Manufacturer Dealer for obtaining engine parts and service.

Operation

The operation section is a reference for the new operator and a refresher for the experienced operator. This section includes a discussion of gauges, switches, machine controls, attachment controls, transportation and towing information.

Photographs and illustrations guide the operator through correct procedures of checking, starting, operating and stopping the machine.

Operating techniques outlined in this publication are basic. Skill and techniques develop as the operator gains knowledge of the machine and its capabilities.

Maintenance

The maintenance section is a guide to equipment care.

Maintenance Intervals

Use the Service hour meter to determine servicing intervals. Calendar intervals shown (daily, weekly, monthly, etc.) can be used instead of service hour meter intervals if they provide more convenient servicing schedules and approximate the indicated service hour meter reading.

Foreword

Recommended service should always be performed at the interval that occurs first.

Under extremely severe dusty or wet operating conditions, more frequent lubrication than is specified in the maintenance intervals chart might be necessary.

Perform service on items at multiples of the original requirement. For example, at every 100 service hours, also service those items listed under every 50 service hours and every 10 service hours or daily.

A Description of the Machine

The small but powerful Boxer 385D can handle “big machine” tasks while providing ease of access as a result of the smaller footprint. Able to handle a full complement of attachments, the diesel-powered 385D allows you to minimize hand labor, reduce overhead and increase productivity. At 34.5” (87.6 cm) wide, the unit can fit through a standard gate. The two-pump, 3,000 psi (207 bar) hydraulic operating system develops optimum hydraulic flow to run the machine’s auxiliary and propulsion systems, providing enough power to handle full-size attachments. A dedicated oil cooler to better manage hydraulic heat generation. With a universal compact utility loader mounting plate and quick-attach system, you can quickly and easily switch between any standard attachment.

DANGER

Never modify this machine!
Modifications to this machine will not only void the warranty, but may cause an unsafe condition that could result in injury or death to the operator.

DANGER

Never lift and/or transport persons, animals, explosive materials, caustic /poisonous materials, pressurized materials, pressurized canisters or any other solid or liquid dangerous substance.

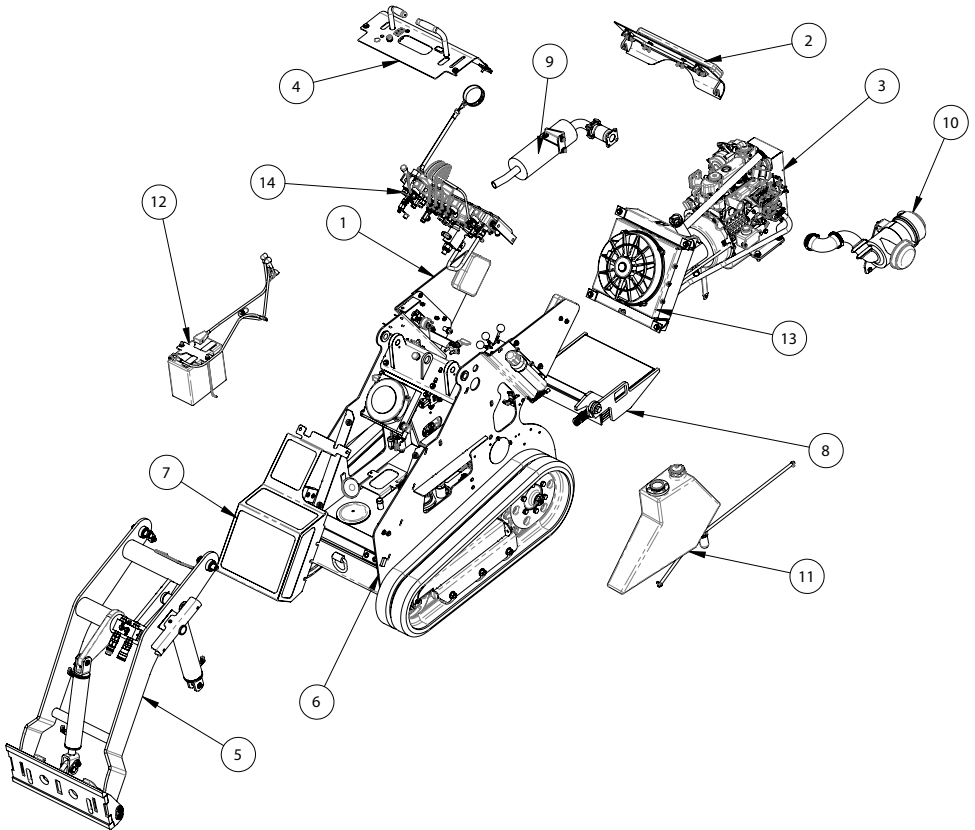
Intended Use

The 385D is designed to accommodate a huge array of attachments. It can lift, transport, and unload materials using a wide array of buckets, forks, and grapples. Other attachments include digging, boring, trenching, mowing, towing, raking, plowing, and compacting.

NOTE: Contact your local dealer or visit boxerequipment.com to view the entire list of available attachments. Only use approved Boxer attachments. Always read all documentation relative to your attachment and know how to operate them safely.

NOTICE

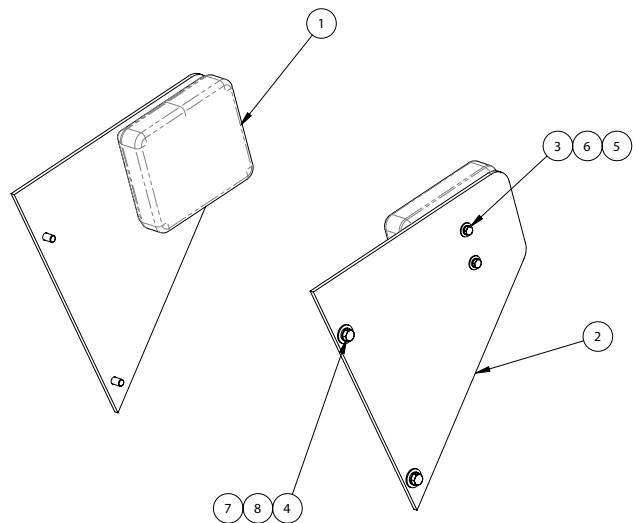
Tip Capacity: 1100lbs (499kg)
Operating Capacity: 385lbs (175kg)

40128-803 Boxer 385D Complete Rev-E

ITEM	QTY.	PART #	DESCRIPTION
1	1	41920	ASSEMBLY, OPER. SIDE GUARD
2	1	41921	DASH PANEL ASSEMBLY, LOWER
3	1	42022	ENG,KU,D902 24HPT3,HYD PUMP
4	1	42024	CONTROL PANEL ASSEMBLY
5	1	44293	BOOM, LIFT ASSEMBLY
6	1	44352	FRAME ASSEMBLY, BOXER 385D
7	1	44389	WELDMENT, FRONT SHROUD

8	1	M40013-803	INSTALL, OPERATOR PLATFORM 322
9	1	M40058-803	EXHAUST ASSEMBLY
10	1	M40059-803	INSTALL, AIR FILTER 322D
11	1	M40062-803	INSTALL ASSY, FUEL SYSTEM, COMPLETE
12	1	M40063-803	INSTALL ASSY, BATTERY, COMPLETE
13	1	M40123-803	INSTALLATION ASSY, COOLANT, 322D
14	1	M40132-803	INSTALL, CONTROLS

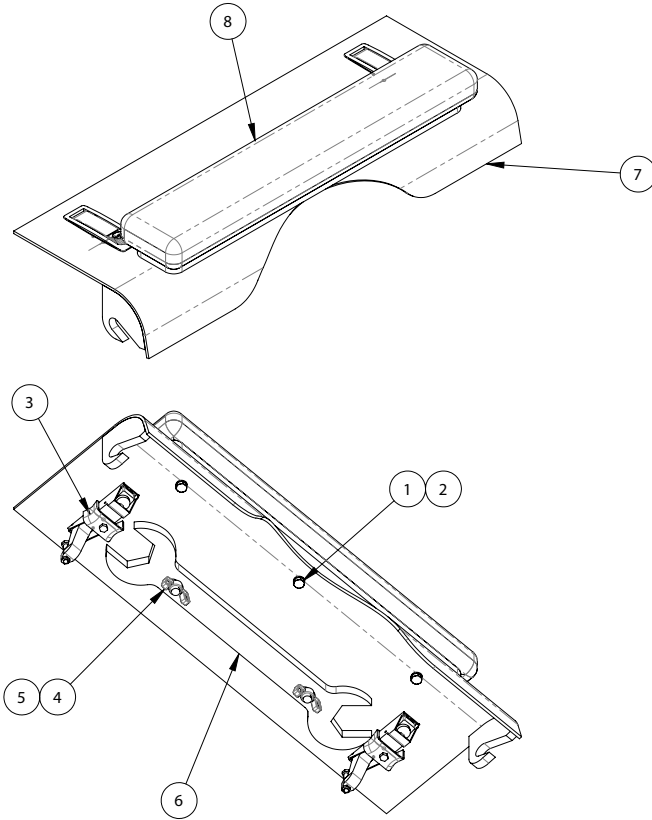
41920 Operator Side Guard Assembly Rev A



ITEM	QTY.	PART #	DESCRIPTION
1	2	43235	PAD, SIDE GUARD, BOXER
2	2	41918	GUARD, OPERATOR SIDE
3	4	722103	BOLT HEX 1/4-20 X 3/4 GR8

4	4	722303	BOLT-HEX 3/8-16 X 1
5	4	726101	WASHER FLAT 1/4 USS
6	4	726102	WASHER-LOCK, 1/4"
7	4	726301	WASHER FLAT 3/8 USS
8	4	726302	WASHER-LOCK 3/8

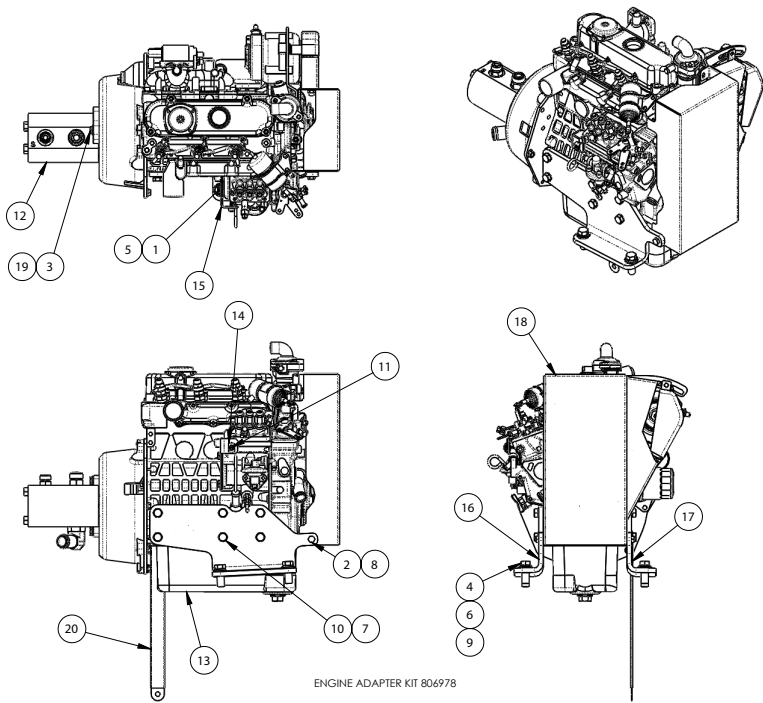
41921 Dash Panel Assembly



ITEM	QTY.	PART #	DESCRIPTION
1	3	722103	BOLT HEX 1/4-20 X 3/4 GR8
2	3	726102	WASHER-LOCK, 1/4"
3	2	760103	LEVER LATCH W/LOCK T275
4	2	802322	NUT-WNNL 3/8-16 ZP

5	2	M24721-379	GROMMET, RUBBER - 0.312B, 0.25
6	1	M30051-803	WRENCH, TRACK
7	1	M40032-803	WELDMENT, ACCESS PANEL -LWR CN
8	1	M40053-806	FRONT PAD ASSY, BOXER 900HD

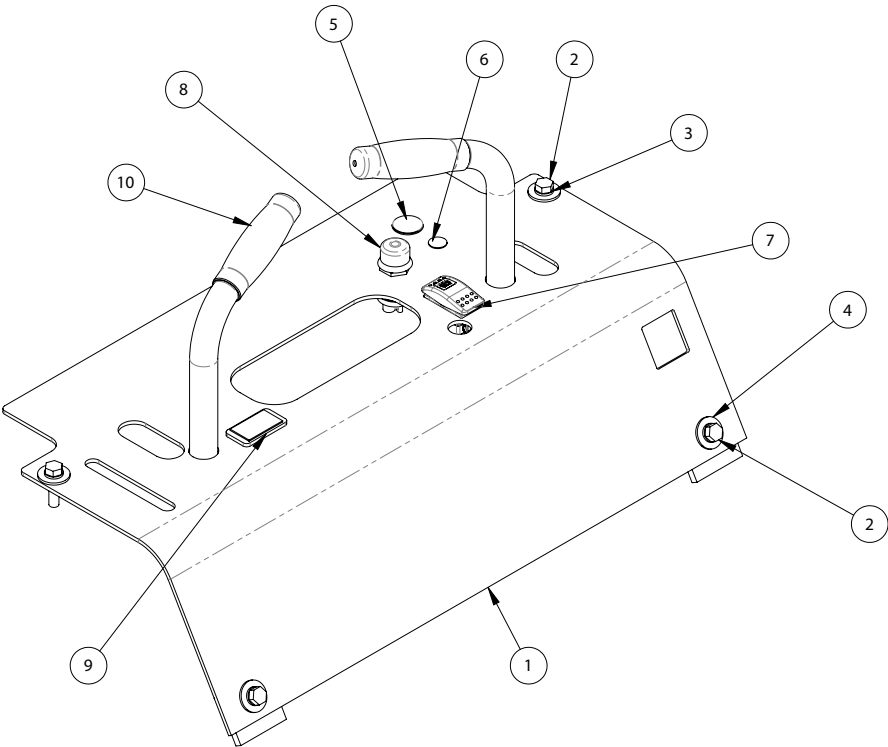
42022 Engine Assembly



ITEM	QTY.	PART #	DESCRIPTION
1	2	722203	BOLT HEX 5/16-18X 3/4 GR8
2	2	722205	BOLT HEX 5/16-18 X 1 GR8
3	2	722304	BOLT-HHCS 3/8-16X1.25 GR8 ZP
4	4	722504	BOLT HEX 1/2-13 x 1 1/2
5	2	726202	WASHER LOCK 5/16" PLATED
6	4	726502	WASHER LOCK 1/2
7	12	726954	WASHER METRIC LOCK M10
8	2	750764	NUT-WHIZ 5/16-18 SERR FLANGE L/N GR8 ZN
9	4	763437	WASHER-FLAT 1/2" SAE ZINC
10	12	764520	BOLT METRIC 10 X 1.25 X 25

11	1	806319	SCREW-10-32 X 3/4" SDHWHMS
12	1	M26711-055	PUMP, PLP20
13	1	M29211-006	ENG.PKG.,KUBOTA 24.8HP@2200RPM
14	1	M29295-025	CLAMP, THROTTLE 691024
15	1	M30140-803	SHEET, THROTTLE 322D
16	1	M30239-803	MOUNT,ENGINE,BOXER 322D LEFT
17	1	M30240-803	MOUNT,ENGINE,BOXER 322D RIGHT
18	1	M40127-803	COVER, ALTERNATOR WELD
19	2	726302	WASHER-LOCK 3/8
20	1	22274	WIRE-ENGINE GROUND

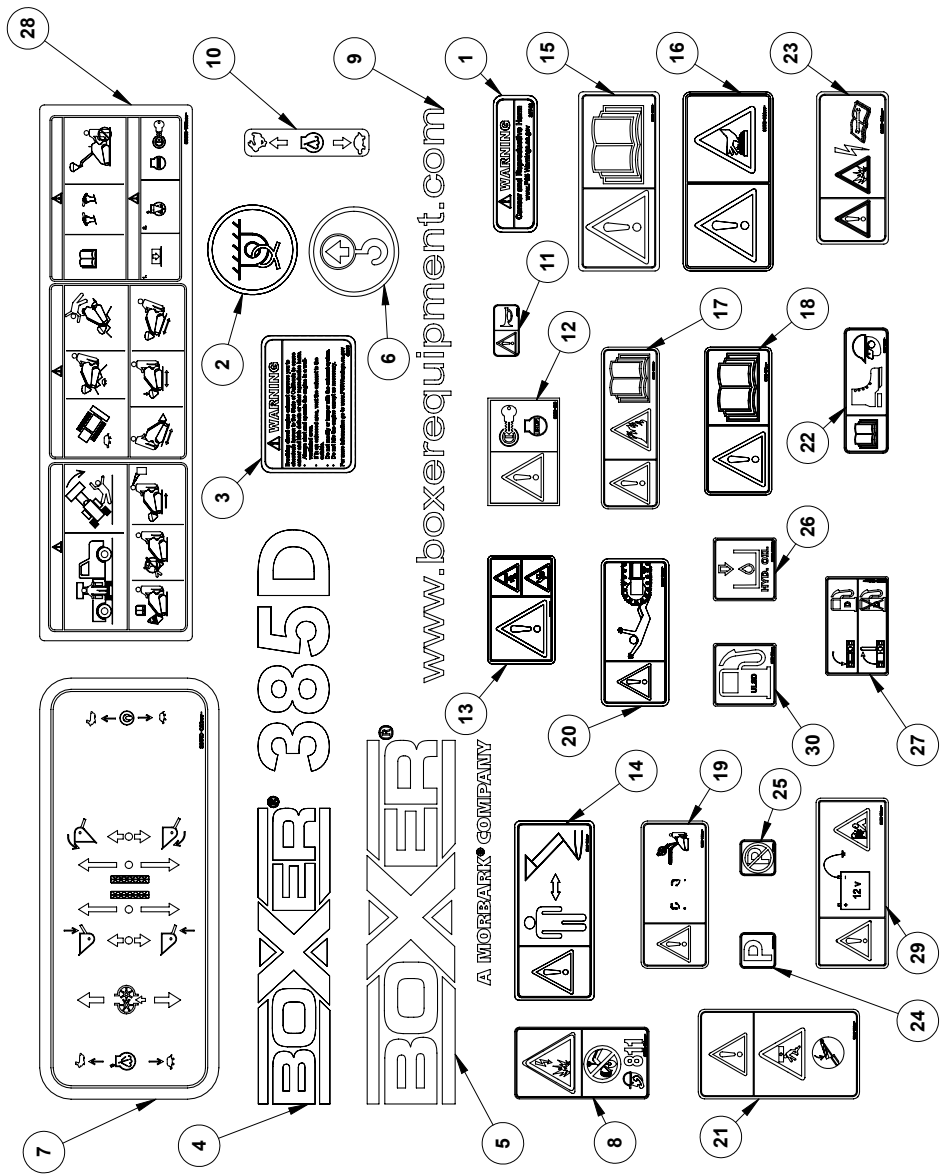
42024 Control Panel Assembly Rev-B



ITEM	QTY.	PART #	DESCRIPTION
1	1	42119	WELDMENT,CONTROL PANEL
2	4	722209	BOLT HEX 5/16-18 X 1 1/4
3	4	726202	WASHER LOCK 5/16" PLATED
4	4	726301	WASHER FLAT 3/8 USS
5	1	762784	PLUG-HOLE BLACK 3/4" SJR

6	1	802825	PLUG-HOLE BLACK 1/2"
7	1	806684	SWITCH-ROCKER, PARK BRK
8	1	806709	SWITCH-PUSH BUTTON SPST MOM.
9	1	M29295-081	LIGHT, OIL / WATER INDICATOR
10	2	M29341-464	GRIP, 9100 TEXTURED .845 X 6"

Decal Kit - 43578

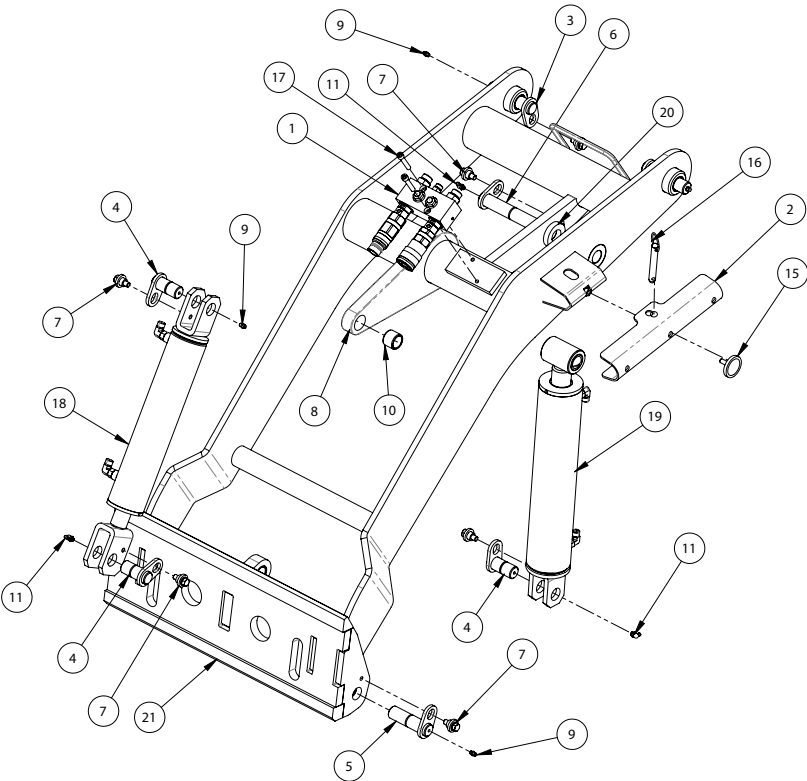


Decal Kit - 43578

17	1	M39510-603	DECAL, WARNING, REFUELING WARNING
18	2	M39510-604	DECAL, WARNING, ATTACHMENT SECURE
19	1	M39510-606	DECAL, LOCKING PIN
20	2	M39510-607	DECAL, DANGER, CRUSH HAZ-ARD,
21	1	M39510-609	DECAL, WARNING, INSTALL CYL LOCK/SYM WA
22	1	M39510-613	DECAL, WARNING, WEAR PROPER SAFETY GEAR
23	1	M39510-620	DECAL, WARNING, EXPLOSION HAZARD
24	1	M39510-677	DECAL, PARKING BRAKE ENGAGE
25	1	M39510-678	DECAL, PARKING BRAKE DISEN-GAGE
26	1	M39510-723	DECAL, HYDRAULIC OIL
27	1	M39510-724	DECAL, CLOSE FUEL SHUT-OFF
28	1	M39510-738	DECAL, OPERATOR SAFETY
29	1	M39510-739	DECAL, WARNING, BATTERY
30	1	M39510-740	GROUND (SYM) DECAL, NOTICE, ULTRA LOW SUL-FUR DIESEL

ITEM	QTY.	PART #	DESCRIPTION
1	1	39748	DECAL-P65 GENERAL WARNING
2	3	41699	DECAL-TIE DOWN POINT
3	1	43036	DECAL-DIESEL EXHAUST WARN-ING
4	2	43579	DECAL, "385D"
5	1	44512	DECAL, BOXER, A MORBARK COMPANY
6	1	804666	DECAL-LIFT POINT
7	1	M39510-021	DECAL, OPERATOR CONTROLS
8	1	M39510-129	DECAL, CALL BEFORE YOU DIG
9	1	M39510-446	DECAL, "BOXEREQUIPMENT.COM"
10	1	M39510-461	DECAL, THROTTLE
11	1	M39510-592	DECAL, HORN BUTTON
12	1	M39510-595	DECAL, E-STOP/BATTERY DISCON-NECT
13	4	M39510-597	DECAL, WARNING, CRUSH HAZ-ARD/SYM DANGER
14	2	M39510-600	DECAL, WARNING, STAY BACK/ SYM DANGER
15	1	M39510-601	DECAL, WARNING, READ MAN/ SYM WARNING
16	2	M39510-602	DECAL, CAUTION, BURN HAZARD/ SYM CONNECT

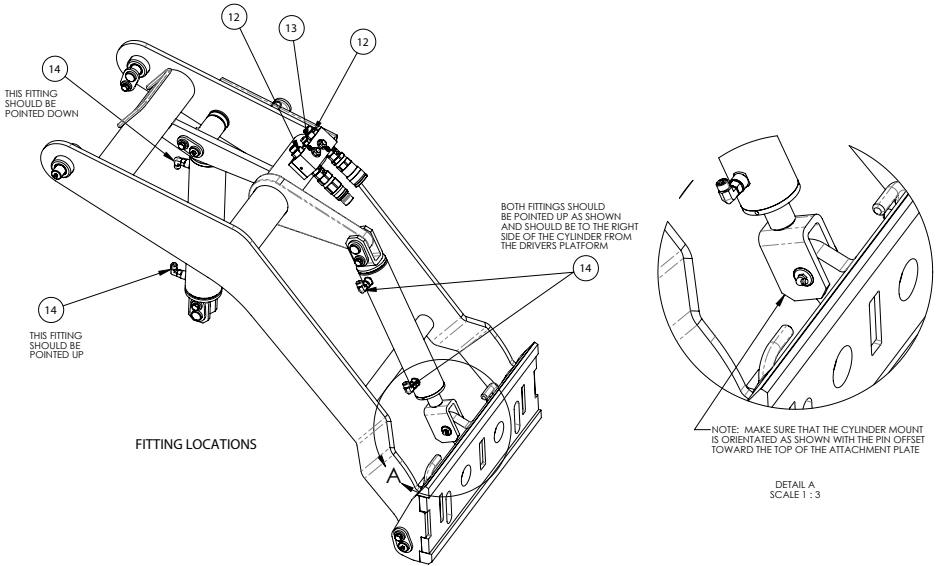
44293 Boom Lift Assembly



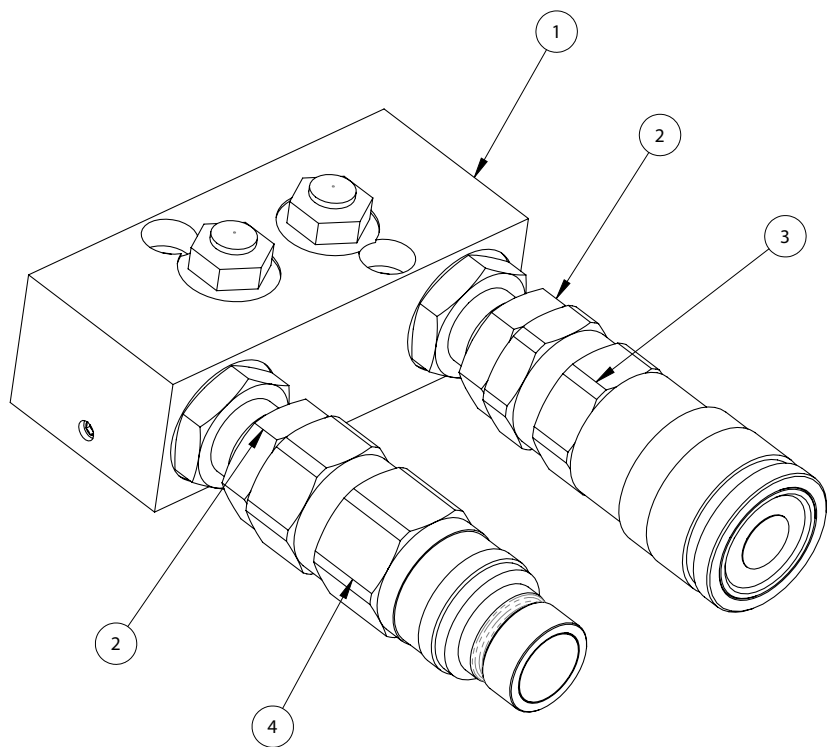
ITEM	QTY.	PART #	DESCRIPTION
1	1	41588	RELIEF MANIFOLD, 2 PUSH BUTTON
2	1	42509	LOCK, BOOM
3	2	43566	LOADER ARM PIN WELD
4	3	43567	BOOM CYLINDER PIN WELD
5	2	43568	ATTACHMENT PLATE PIN WELD
6	1	43571	BOOM CYLINDER PIN WELD
7	8	43576	FLOATING PIN SPACER ASM, 3/8"-16
8	1	44322	WELDMENT, BOOM ARM 375/385D
9	5	730011	ZERK-GREASE 1/4-28 STR
10	9	730077	BUSHING STEEL 1.25X1X1
11	3	730085	ZERK-GREASE 1/4-28 90DEG

12	2	800425	FIT-8MORFS X -10MOR
13	1	800441	FIT--4MORFS X -4MORB
14	4	800442	FIT-EL90-4MORFS X -4MORB
15	1	806239	KNOB-ROUND 5/16-18 X 3/4" STUD
16	1	806240	PIN, QUICK RELEASE 1/2" X 3"
17	2	806241	BOLT-SHCS 5/16-18 X 1 3/4
18	1	M26820- 301	HYD.CYLINDER,2.5X10.25 X1.250
19	1	M26820- 302	HYD CYLINDER,3 X 12 X-1.5
20	2	M30053- 803	SPACER,BOOM LIFT CYL,LIL BRUTE
21	1	M40011- 803	ATTACHMENT PLATE ASSY COMPLETE

44293 Boom Lift Assembly



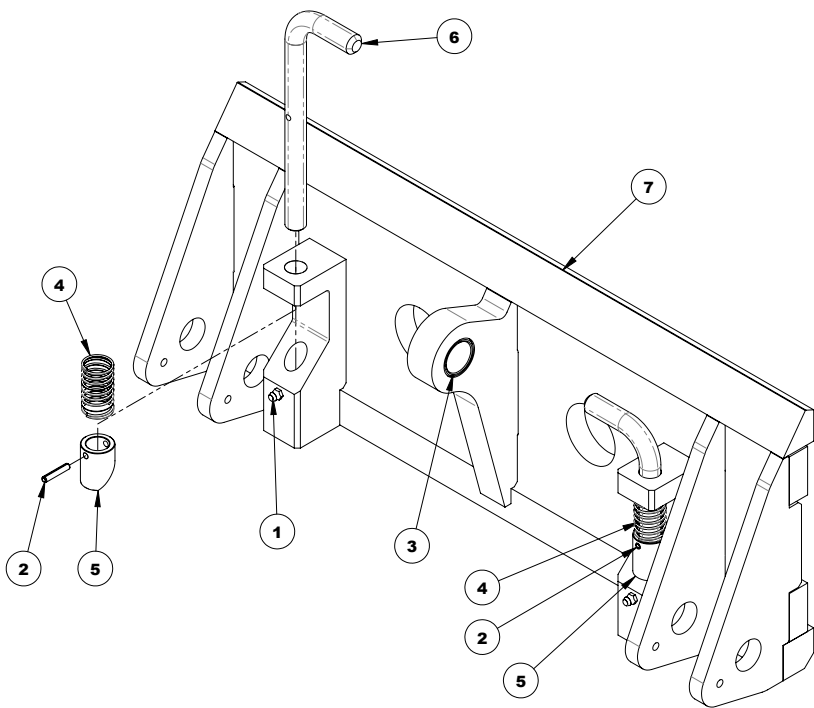
41588 Relief Manifold



ITEM	QTY.	PART #	DESCRIPTION
1	1	806798	RELIEF,MANIFOLD,2 PUSH BUTTON
2	2	806264	FIT-08 ORFS BULKHEAD

3	1	806795	FITTING, QDISC FFH08 58SAE F
4	1	806796	FITTING, FFH08 58SAE M

M40011-803 Attachment Plate Assembly Rev C



ITEM	QTY.	PART #	DESCRIPTION
1	2	730011	ZERK-GREASE 1/4-28 STR
2	2	730086	PIN-ROLL 3/16" X 1" ZP
3	1	730077	BUSHING STEEL 1.25X1X1

4	2	M24741-087	SPRING, 15/16OD X .080 9657K27
5	2	M30042-803	COUPLER, LATCH STOP
6	2	M30090-803	PIN, MALE COUPLER
7	1	M40105-806	PLATE, ATTACHEMENT

44352 Frame Assembly Rev-E

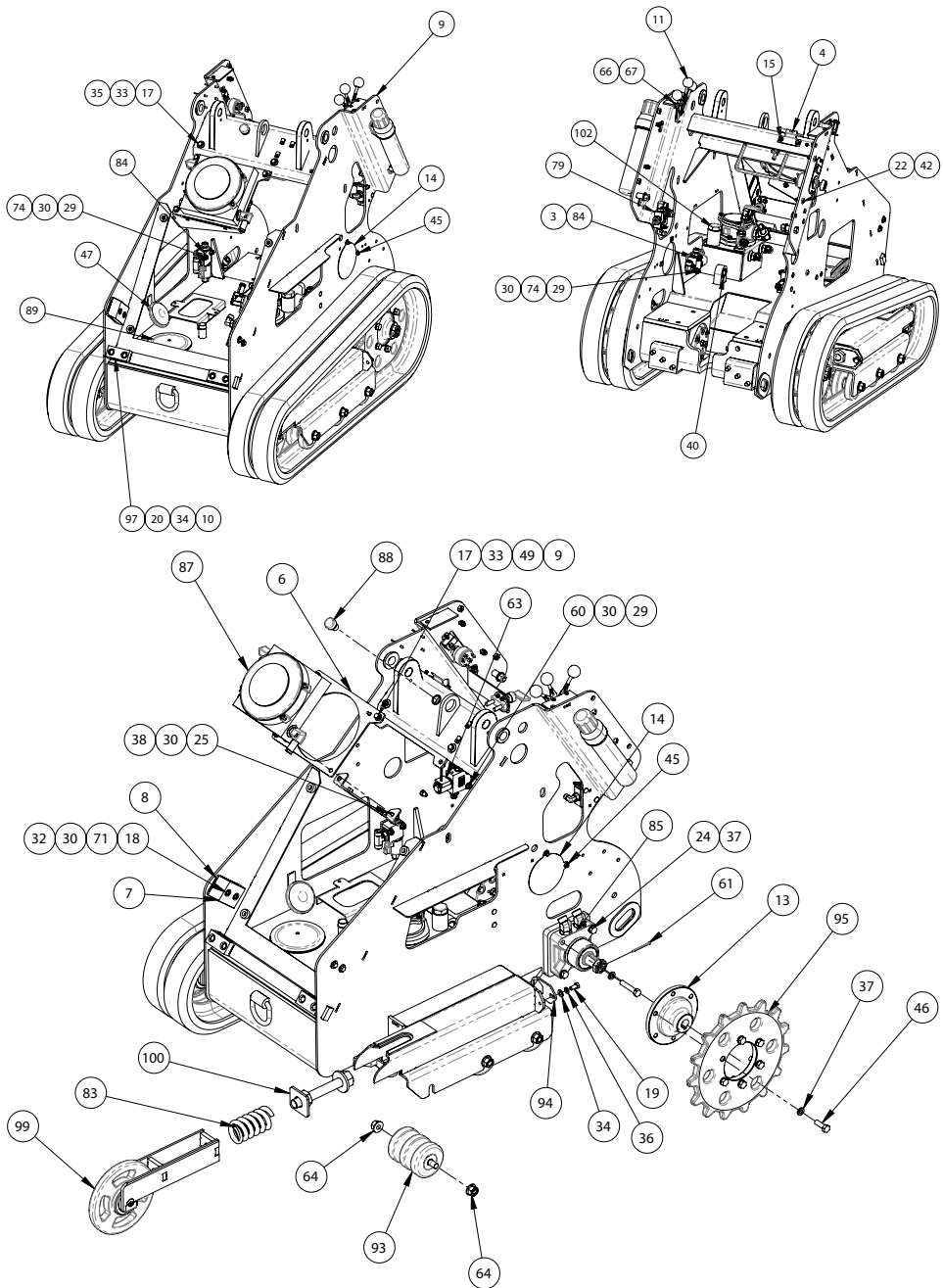
ITEM	QTY.	PART #	DESCRIPTION
1	1	37398	TAG- SN/VIN CE EPA
2	1	41903	BATTERY DISCON- NECT MOUNT
3	2	42505	SPACER, SOLENOID VALVE
4	1	42516	FUSE BLOCK MOUNT PLATE
5	1	42966	SPACER, BRAKE VALVE
6	1	43087	PLATE, BASE, HY- DRAULIC COOLER
7	2	43980	BLOCK, GUIDE, BOOM ARMS
8	4	43986	SHIM, 12 GA. GUIDE BLOCK
9	1	44008	WELDMENT, FRAME
10	4	44335	SHIM,BUMPER, LOADER,BOXER
11	1	44353	THROTTLE CABLE REWORK
12	1	44436	FITTING, 90 DEG EL- BOW W/RESTRICTOR
13	2	44919	CASTING, HUB -MA- CHINED COMP.
14	1	45070	COVER, OIL FILTER ACCESS
15	2	722110	BOLT WHIZ 1/4-20 X 3/4
16	2	722203	BOLT HEX 5/16-18X 3/4 GR8
17	5	722205	BOLT HEX 5/16-18 X 1 GR8
18	4	722209	BOLT HEX 5/16-18 X 1 1/4
19	2	722302	BOLT HEX 3/8-16 X 3/4 GR8
20	4	722304	BOLT-HHCS 3/8- 16X1.25 GR8 ZP
21	2	722320	BOLT CAR 1/4-20 X 1
22	5	722339	BOLT CAR 5/16-18 X 1" LG
23	2	722506	BOLT HEX 1/2 - 13 X 2 GR8
24	8	722508	BOLT HEX 1/2-13 x 2.5
25	4	722830	BOLT METRIC 6 X 1.0 X 16
26	4	724104	SCREW-#10-24 X 3/4 HH
27	4	724105	NUT HEX LOCK #10- 24
28	1	724201	NUT HEX 5/16"-18 GR8
29	10	724508	NUT LOCK 1/4-20 NYLOCK
30	18	726101	WASHER FLAT 1/4 USS
31	2	726103	WASHER LOCK #10
32	4	726201	WASHER - FLAT 5/16
33	6	726202	WASHER LOCK 5/16" PLATED
34	6	726300	WASHER FLAT 3/8 SAE
35	2	726301	WASHER FLAT 3/8 USS
36	2	726302	WASHER-LOCK 3/8
37	20	726502	WASHER LOCK 1/2
38	4	726950	WASHER METRIC LOCK 6MM
39	2	730024	CLAMP-HOSE 1/4"- 5/8", 5/16" BAND
40	1	730077	BUSHING STEEL TENSION SPRING 1.25X1X1
41	1	738119	FIT- 8MP - 6FP
42	4	750050	NUT LOCK 5/16-18 NYLON
43	4	750463	RIVET-3/16 X 3/8 STL- MAND
44	4	750493	WASHER FLAT #10
45	2	750765	BOLT WHIZ 1/4-20 X 1/2
46	12	760979	BOLT HEX 1/2-20 X 1-1/2 GR8
47	1	762788	HORN-HIGH TONE
48	2	763437	WASHER-FLAT 1/2" SAE ZINC
49	5	763757	WASHER FLAT 5/16 HARDENED
50	1	800266	FIT-EL90 -6MORB X -6MORFS
51	2	800427	FIT-08ORFS X -08MOR
52	1	800441	FIT--4MORFS X -4MORB
53	1	801040	FIT -6MP -6MBEAD
54	1	801084	MAGNET-CERAMIC RING
55	2	801296	FIT-EL90-12BT- 12MORB
56	2	801923	FIT-EL90 -4MORFS- 6MOR
57	1	802854	FIT-PLUG-12MOR HEX HEAD
58	1	802998	TUBE-MANUAL 2" DIA X 12.5" LONG

44352 Frame Assembly Rev-E

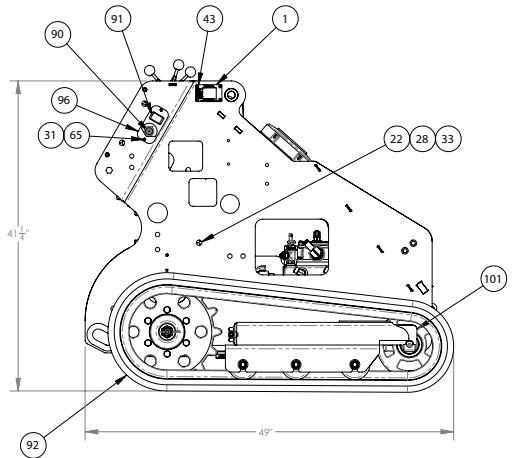
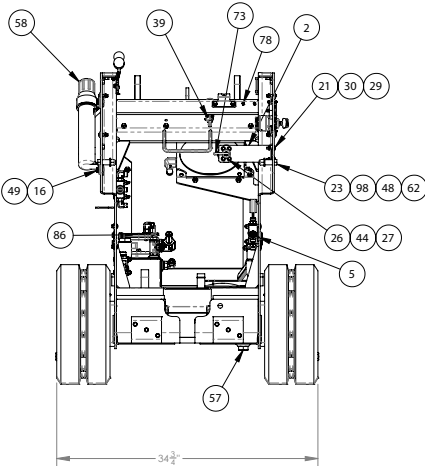
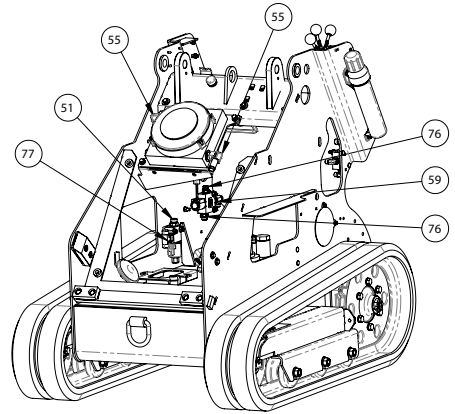
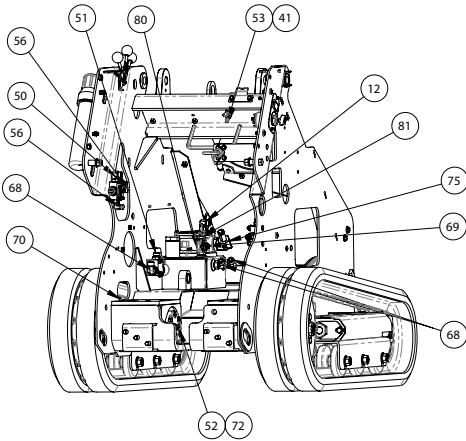
59	1	803259	FIT- RUN TEE -6MOR -6FORFS -6MOR
60	4	803295	BOLT CAR 1/4-20 X 2
61	2	803420	PIN-COTTER 5/32 X 2 ZINC
62	2	805573	NUT-HNNL 1/2-13 ZP GR8
63	1	805793	VALVE-2POS/3WAY WP CONNECTOR
64	12	806203	NUT-FLANGE 5/8-11 LOCK
65	2	806231	SCREW-10-32 X1 PHILLIPS FILLISTER
66	2	806232	NUT-HNNL 10-32
67	2	806238	SCREW-SFHCS 10-32 X 5/8" ZP
68	3	806261	FIT-EL90-8MORFS X -8MORB
69	1	806314	FIT-4MORFS-6MORB
70	4	806325	FIT-EL45-10MORFS- 10MORB
71	4	806340	NUT-STEELTOP LOCK 5/16-18 GRD C
72	1	806717	FIT-TEE -04MORFS -04MORB -04MORFS
73	1	806718	BATTERY SHUT-OFF SWITCH
74	4	807035	BOLT CAR 1/4-20 X 2 1/4
75	1	807036	FIT-EL90-12BT- 16MORB
76	3	807165	FIT-6MORFS-4MORB
77	1	807364	FIT-TEE-08MORFS X 08MORFS X 08MORB
78	2	807472	10-24 X 3/4" PHILLIPS FILLISTER HD
79	1	808123	VALVE-PRESSURE REDUCING, 300 PSI
80	1	808182	FIT-TEE -8MORB- 8FORB-8FORB
81	1	808183	FIT- -06BEAD X -08MORB
82	1	M18511- 445	HOSE, VENT 3/8" X 30"

83	2	M24741- 190	SPRING, TRACK TEN- SION 2.87 X 5
84	2	M26676- 203	VALVE, SOLENOID
85	2	807672	MOTOR
86	1	M26838- 315	FILTER, TANK MOUNT 25 GPM 3/4
87	1	M26844- 131	COOLER, HYD ECO-4 W/12V FAN
88	1	M26849- 275	BREATHER, 1/2" MPT NYLON
89	1	M26849- 402	6" CLEANOUT COVER
90	1	M29211- 935	IGNITION SWITCH W/ KEY
91	1	M29316- 962	METER, HOUR 12V DIGITAL
92	2	M29510- 401	TRACK, RUBBER 180 X 36 X 72 "T
93	6	M29510- 520	WHEEL SPOOL ASSY,MIDWHEEL
94	2	M30010- 803	PLATE, TENSION LOCK
95	2	M30109- 803	SPROCKET-15T
96	1	M30110- 803	SHEET, SWITCHPAN- EL 322D
97	2	M30235- 805	BUMPER, LOADER,BOXER
98	2	M33107-703	TUBING, CONTROL PANEL SPACER
99	1	M40009- 803	ASSY, FRONT IDLER "MECH AD" LH
100	2	M40019- 803	ASSEMBLY, TENSION- ING BOLT
101	1	M40040- 803	ASSY, FRONT IDLER,"MECH AD"-RH
102	1	M40088- 803	DIPSTICK, HYDRAULIC
103	1	M47001- 803	HARNES, ALARM- LOW OIL

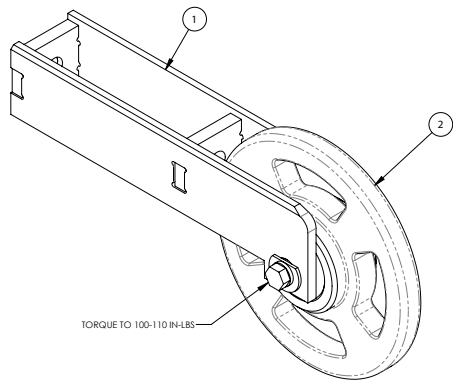
44352 Frame Assembly Rev-E



44352 Frame Assembly Rev-E



M40009-803 Left Hand Front Idler Assembly Rev G

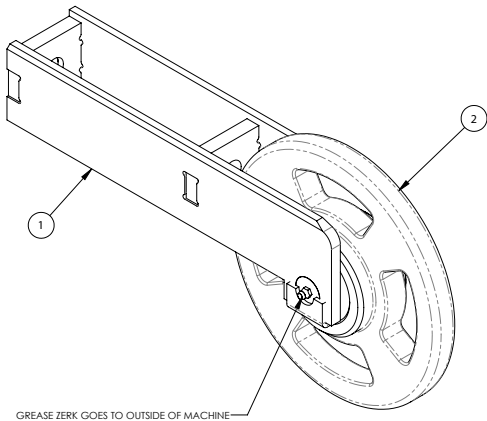


NOTE: GREASE ZERK ON FRONT IDLER
GOES TO THE OUTSIDE OF THE MACHINE

ITEM	QTY.	PART #	DESCRIPTION
1	1	M40055-801	WELDMENT, TRACK FORK

2	1	M40070-803	ASSY, FRONT IDLER "MECH AD"
---	---	------------	--------------------------------

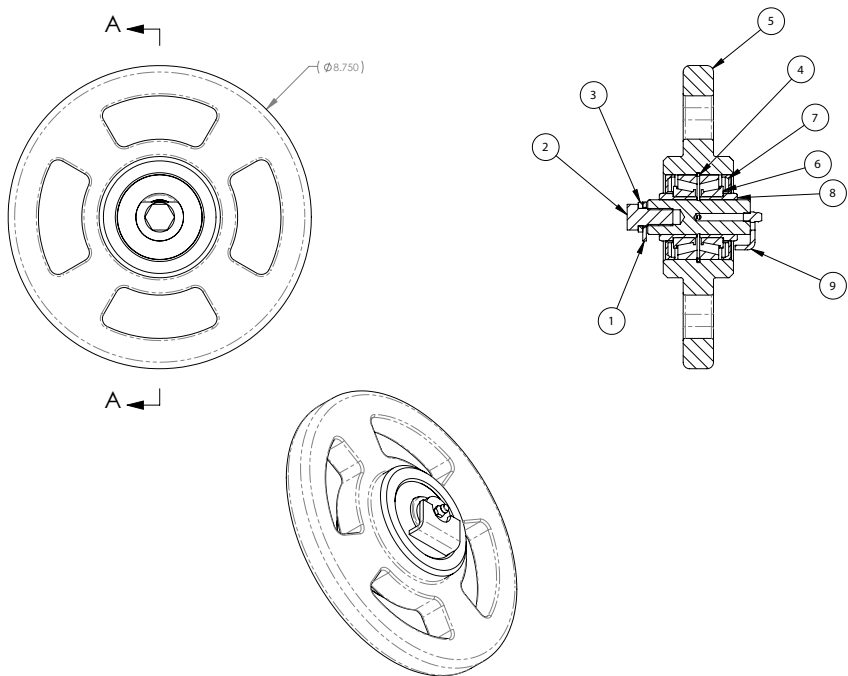
M40040-803 Right Hand Front Idler Assembly Rev-G



ITEM	QTY.	PART #	DESCRIPTION
1	1	M40055-801	WELDMENT, TRACK FORK

2	1	M40070-803	ASSY, FRONT IDLER "MECH AD"
---	---	------------	--------------------------------

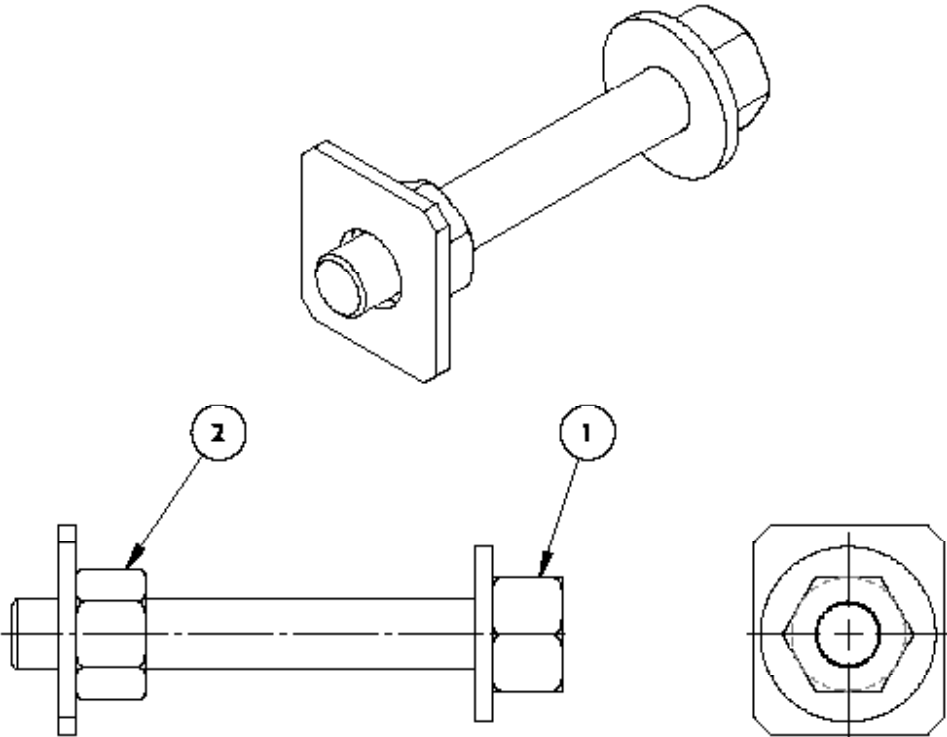
M40070-803 Front Idler Wheel Assembly



ITEM	QTY.	PART #	DESCRIPTION
1	1	39920	WASHER, CLIPPED 12GA X 1/2 X 1-3/8
2	1	722502	BOLT HEX 1/2-13 x 1
3	1	726502	WASHER LOCK 1/2
4	1	M24125-008	RING-SNAP DIN 472 HD 62MM

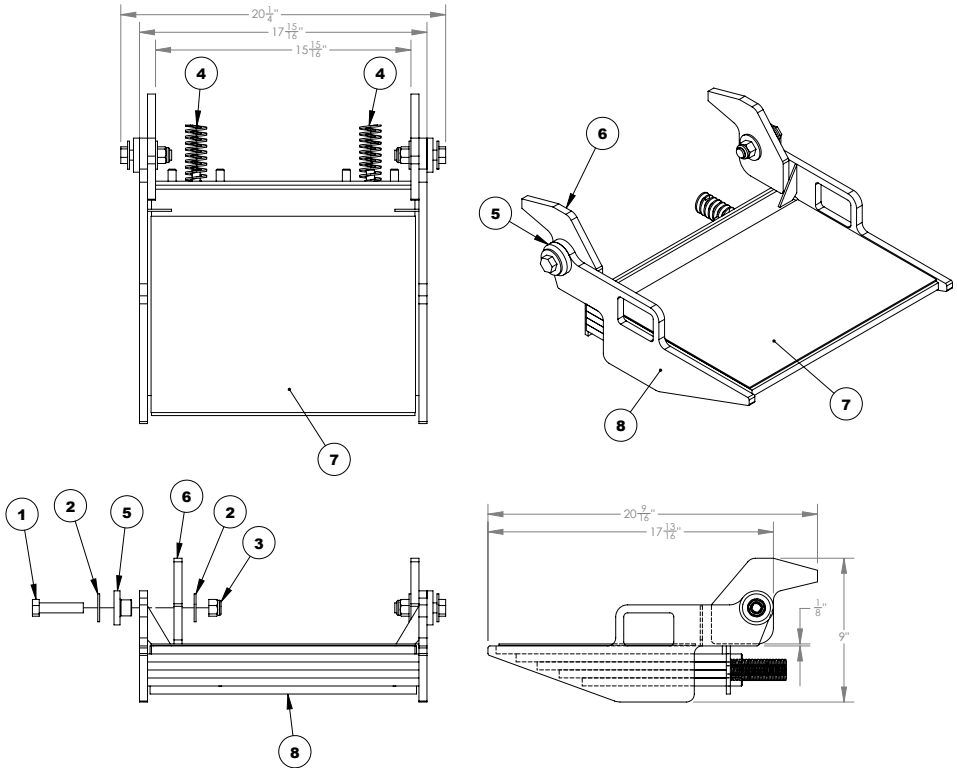
5	1	M29510-404	MACHINING, IDLER FRONT WHEEL
6	2	M29510-427	BEARING-30206A
7	2	M29510-431	SEAL-62 X 35 X 7MM
8	2	M30017-803	TUBE, IDLER
9	1	M40018-803	WELDMENT, IDLER WHEEL PIN -SHA

M40019-803 Tensioning Bolt Assembly Rev B



ITEM	QTY.	PART #	DESCRIPTION
1	1	M40057-801	BOLT, TRACK ADJUSTING

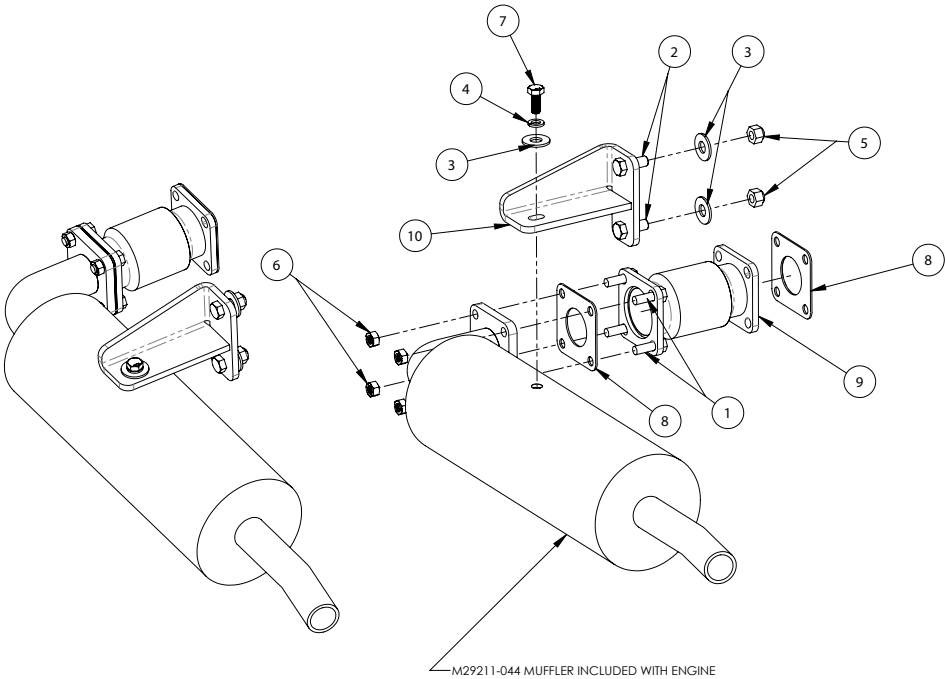
2	1	M40007-803	WELDMENT, TENSION- ING BOLT PLATE
---	---	------------	--------------------------------------

M40013-803 Operator Platform Rev-A

ITEM	QTY.	PART #	DESCRIPTION
1	2	722708	BOLT HEX 5/8-11 X 2-3/4 GR8
2	4	726701	WASHER FLAT - 5/8"
3	2	763485	NUT-HNNL 5/8-11
4	2	M24741-188	SPRING, COMPRESSION DIE 1 1/2X
5	2	M30033-803	ROUND, OP BUSHING

6	2	M30050-803	PLATE, PLATFORM STOP
7	1	M32234-901	MATT, RUBBER FLOOR
8	1	M40022-803	WELDMENT, OPERATOR PLATFORM (3

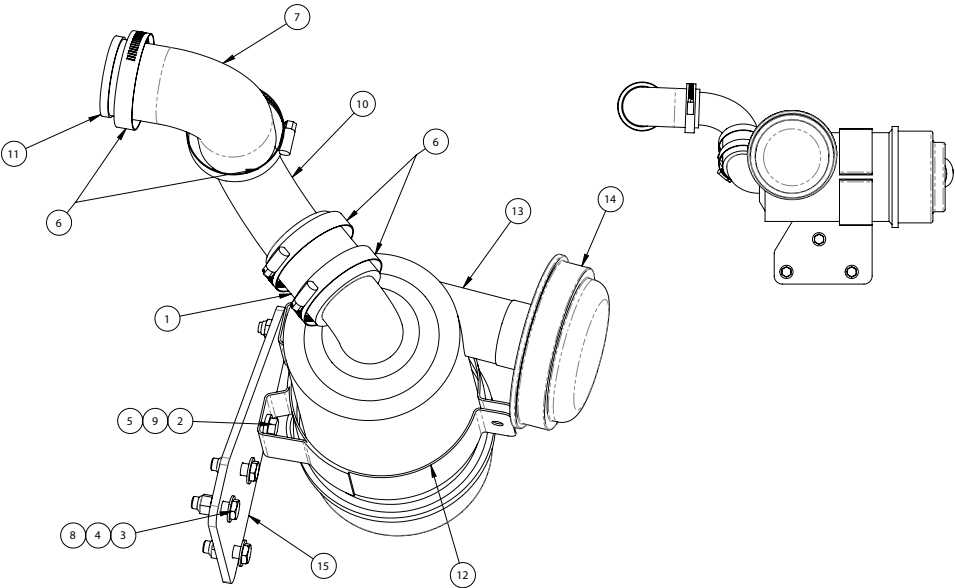
M40058-803 Exhaust Assembly Rev A



ITEM	QTY.	PART #	DESCRIPTION
1	4	722205	BOLT HEX 5/16-18 X 1 GR8
2	2	722303	BOLT-HEX 3/8-16 X 1
3	3	726301	WASHER FLAT 3/8 USS
4	1	750389	WASHER METRIC LOCK M8 PL
5	2	760261	NUT-HNNL 3/8-16 INS

6	4	806340	NUT-STEELTOP LOCK 5/16-18 GRD C
7	1	806341	BOLT-HHCS M8 X 1.25 X 20mm
8	2	M29211-679	GASKET, EXHAUST
9	1	M29295-029	EXHAUST FLEX JOINT
10	1	M40064-803	WELDMNT, MUFFLER BRKT 322D

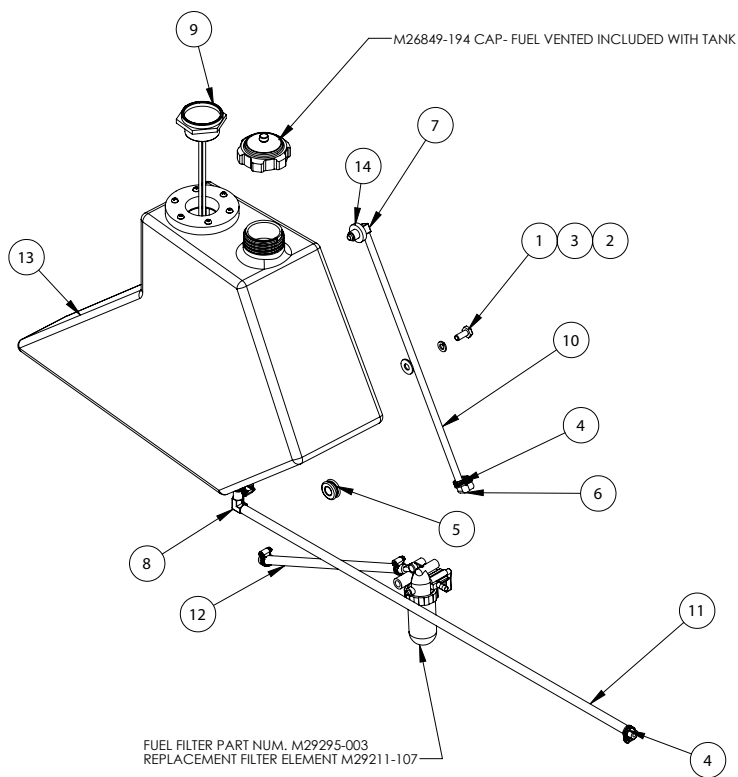
M40059-803 Air Filter Assembly Rev C



ITEM	QTY.	PART #	DESCRIPTION
1	1	17384	HOSE-SLEEVE 2" ID X 2.5" EPDM
2	2	722205	BOLT HEX 5/16-18 X 1 GR8
3	3	722304	BOLT-HHCS 3/8-16X1.25 GR8 ZP
4	6	726300	WASHER FLAT 3/8 SAE
5	2	750050	NUT LOCK 5/16-18 NYLON
6	4	750415	CLAMP-HOSE 2" - 2-15/16"
7	1	750679	ELBOW-RUBBER 90D 2"
8	3	760261	NUT-HNNL 3/8-16 INS

9	4	763757	WASHER FLAT 5/16 HARDENED
10	1	M29295-038	TUBE, INTAKE ELBOW
11	1	M29295-079	REDUCER, RUB INSERT 2" - 1 1/2"
12	1	M29295-111	AIR CLEANER CLAMP
13	1	M29295-136	AIR FILTER ASSEMBLY
14	1	M29321-406	RAIN BONNET
15	1	M30135-803	AIR FILTER, BRACKET

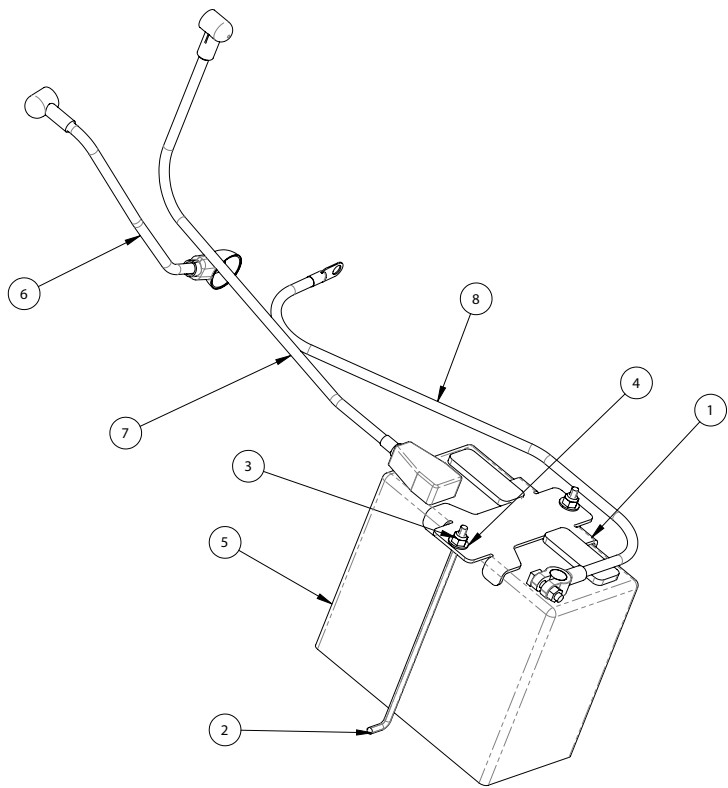
M40062-803 Fuel Assembly Rev C



ITEM	QTY.	PART #	DESCRIPTION
1	2	722203	BOLT HEX 5/16-18X 3/4 GR8
2	2	726201	WASHER - FLAT 5/16
3	2	726202	WASHER LOCK 5/16" PLATED
4	6	730024	HOSE CLAMP
5	1	M24721-389	RUBBER GROMMET
6	1	M25978-134	FITTING, HB 3/16 X 1/8 MNPT
7	1	M25978-179	ELBOW, HB 3/16-BUSHED

8	1	M26531-132	FITTING, 1/4 HB X 1/4 NPT 90
9	1	M26849-043	THREADED FUEL GUAGE
10	1	M32249-901	HOSE, FUEL, BOXER 322D
11	1	M32250-901	HOSE, FUEL, BOXER 322D
12	1	M32251-901	HOSE, FUEL, BOXER 322D
13	1	M32531-901	TANK, FUEL, POLY, BOXER
14	1	M39236-441	TANK INSERT, RUBBER

M40063-803 Battery Assembly Rev E



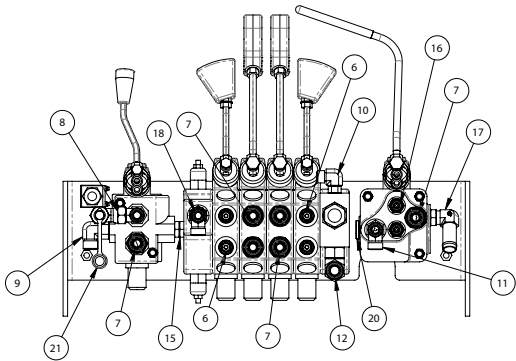
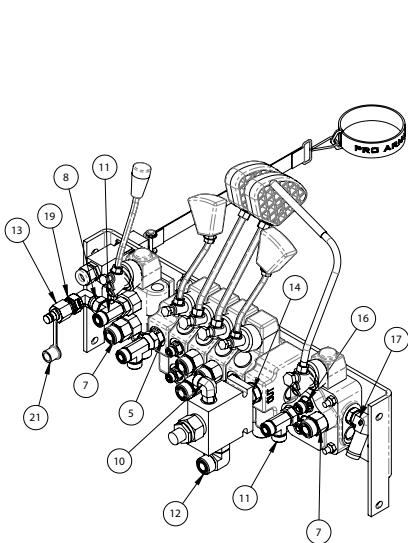
ITEM	QTY.	PART #	DESCRIPTION
1	1	40694	PLATE, BATTERY HOLD DOWN
2	2	40696	BATTERY L-BOLT
3	2	724508	NUT LOCK 1/4-20 NY-LOCK
4	2	726101	WASHER FLAT 1/4 USS

5	1	806234	BATTERY-51 500CCA
6	1	M47004-803	CABLE ASSY, POSITIVE
7	1	43032	CABLE-BATTERY RED 4 GA. 40"
8	1	M47007-803	HARNESS ASSY, BATTERY CABLES

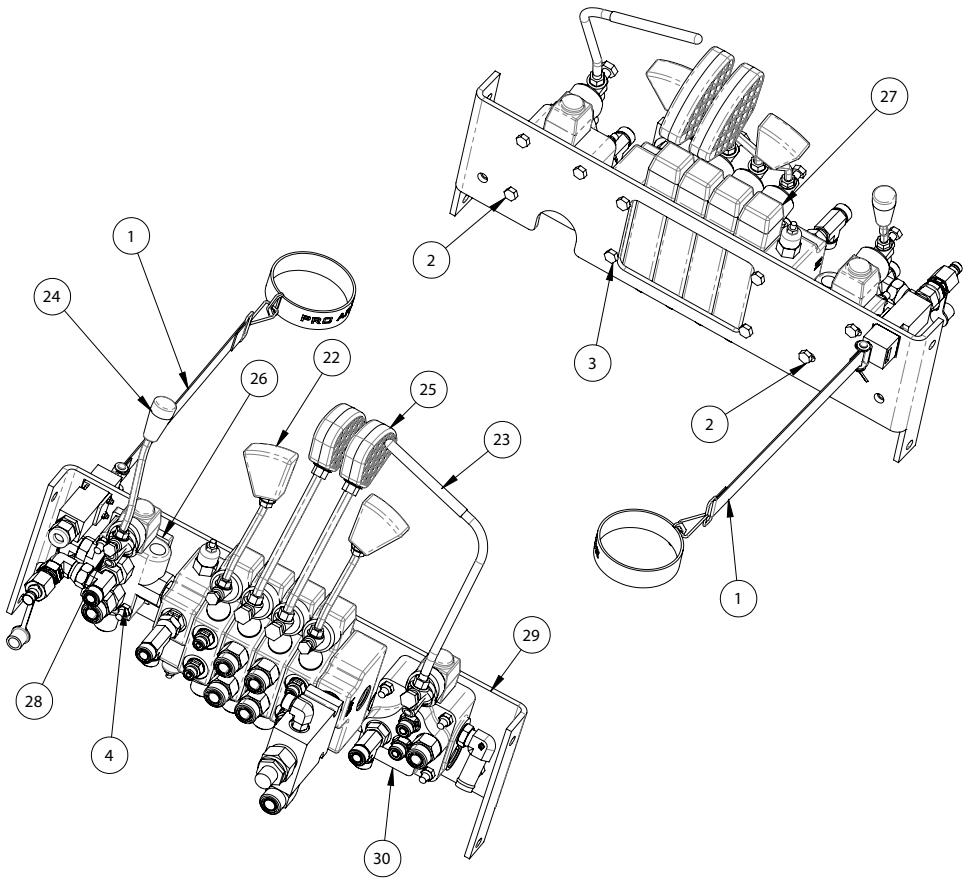
M40132-803 Controls Assembly Rev-B

ITEM	QTY	PART #	DESCRIPTION
1	1	41754	SWITCH, SAFETY TETHER
2	5	722204	BOLT HEX 5/16-18 X 2 3/4 GR8
3	4	722837	BOLT-MHHCS 8 X 1.25 X 16
4	5	750050	NUT LOCK 5/16-18 NYLON
5	1	800427	FIT-08ORFS X -08MOR
6	4	801525	FIT-4MORFS-6MORB
7	6	801834	FIT-10MORFS X -08MOR
8	1	802475	FIT- EL90 -08MORFS X -08FORFS SWIVEL
9	1	806261	FIT-EL90-8MORFS X -8MORB
10	1	806262	FIT-EL90-6MORFS X -4MORB
11	2	806277	FIT-TEE-08MORFS- 08MOR-08MORFS
12	1	806328	FIT-EL90 -10MORFS- 10MORB
13	1	806349	NIPPLE, COUPLER (TEST PORT)
14	1	806815	FIT-STR-10 MORB X -10MORB
15	1	806887	FIT-STR-08 MORB X -08MORB

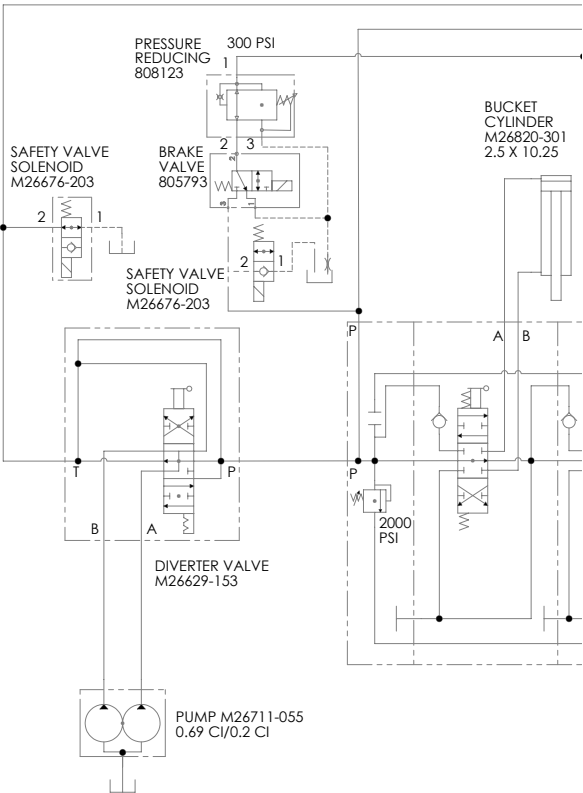
16	2	806890	FIT- -6MORFS X -6MOR
17	1	806891	FITTING, HB 12 X 08 SAE ORING
18	1	807161	FITTING-TEE -08MORFS X08FORFS X -08MORFS
19	1	807260	FIT-REDUCER- 8FORFS-6MORFS
20	1	807279	FIT-PLUG-10MOR
21	1	M26538- 416	DUST CAP
22	2	M29341- 462	HANDLE, MOLDED -OUTER CONTROLS
23	1	M29341- 463	GRIP, 9100 TEXTURED
24	1	M29341- 497	KNOB
25	2	M29341- 498	HANDLE, MOLDED DRIVE CONTROLS
26	1	M30045- 803	PLATE, SPACER DI- VERTER VALVE
27	1	M40016- 803	ASSY, CONTROL VALVE
28	1	M40041- 803	ASSY, DIVERTER VALVE
29	1	M40137- 803	WELDMENT, JOYSTICK MOUNT
30	1	M40139- 803	AUXILIARY VALVE ASSY



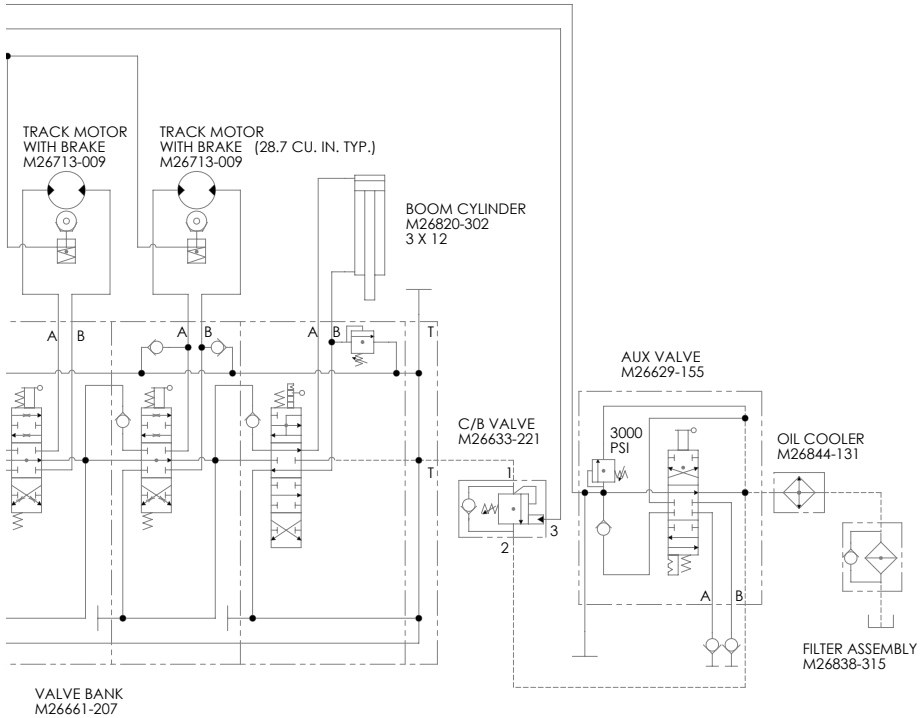
M40132-803 Controls Assembly Rev-B



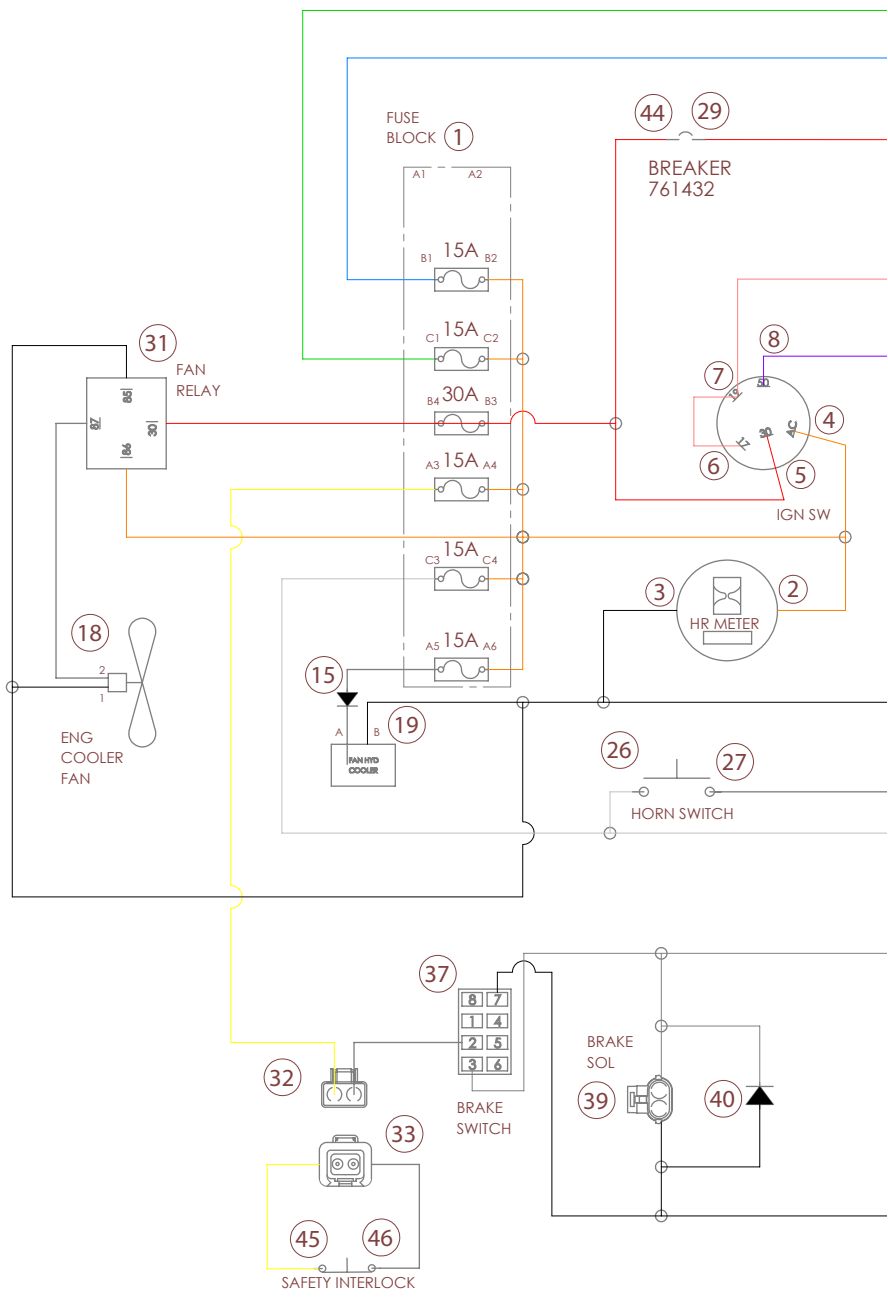
Hydraulic Schematic - M48010-803



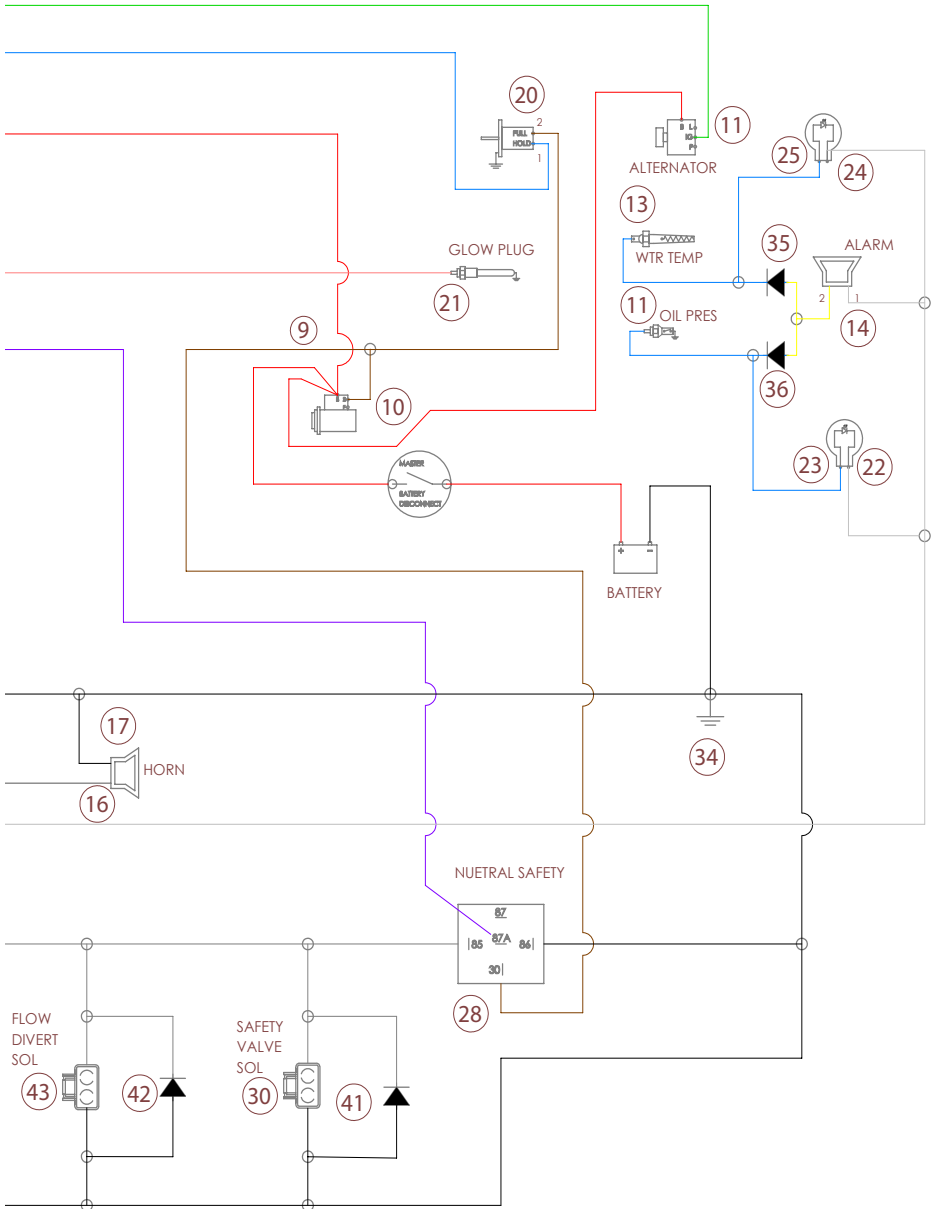
Hydraulic Schematic - M48010-803



Wiring Schematic - 43028



Wiring Schematic - 43028



Wiring Schematic - 43028

FROM		WIRE DESCRIPTION (FUNCTION IMPRINT)	GAUGE	COLOR	TO	
PLUG#	PIN#				PLUG#	PIN #
1	B1	FUEL SOL HOLD	16	BLU	20	B
1	B2	FUSE PWR	16	ORG	SP1	-
1	C1	ALT EXCITE	16	GRN	12	-
1	C2	FUSE PWR	16	ORG	SP1	-
1	A3	SFTY INTERLOCK PWR	16	YLW	32	A
1	A4	FUSE PWR	16	ORG	SP1	-
1	B3	KEY POWER	10	RED	SP2	-
1	B4	FAN RELAY PWR	10	RED	31	30
1	C3	WARNING LMP PWR	16	WHT	SP3	-
1	C4	FUSE PWR	16	ORG	SP1	-
1	A5	DIODE ANODE	16	TAN	15	A
1	A6	FUSE PWR	16	ORG	SP1	-
2	-	HR MTR PWR	16	ORG	SP1	-
3	-	HR MTR GND	16	BLK	SP4	-
4	-	IGN SW AC	16	ORG	SP1	-
5	-	IGN SW 30	10	RED	SP2	-
6	-	IGN SW 17	14	RED/WHT	SP5	-
7	-	IGN SW 19	14	RED/WHT	SP5	-
8	-	IGN SW 50	16	VIO	28	87A
9	-	POWER TO BREAKER	10	RED	29	-
10	-	START SIG	16	BRN	SP6	-
11	-	OIL PRES	18	GRN	SP8	-
13	-	WTR TEMP	18	BLU	SP9	-
14	1	WARNING LMP PWR	18	WHT	SP3	-
14	2	WARNING ALARM OUT	18	YLW	SP10	-
15	C	DOIDE CATHODE	18	TAN	19	A
16	-	HORN SIG	18	GRY	27	-
17	-	HORN GND	18	BLK	SP4	-
18	1	FAN GND	10	BLK	SP4	-
18	2	FAN PWR	10	RED	31	87
19	B	FAN GND	16	BLK	SP4	-
20	A	FUEL SOL PULL	16	BRN	SP6	-
20	C	GND	16	BLK	SP4	-
21	-	PRE HEAT	16	RED/WHT	SP5	-
22	-	WARNING LMP PWR	18	WHT	SP3	-
23	-	OIL PRES	18	GRN	SP8	-
24	-	WARNING LMP PWR	18	WHT	SP3	-
25	-	WATER TMP	18	BLU	SP9	-
26	-	HORN SW PWR	18	WHT	SP3	-
28	30	NEUTRAL SFTY SIG	16	BRN	SP6	-
28	85	BRAKE SW OUT	18	GRY	SP11	-
28	86	NEUTRAL SFTY GND	18	BLK	SP4	-
30	A	SFTY VLV SIG	18	GRY	SP11	-
30	B	SFTY VLV GND	18	BLK	SP4	-
31	86	FAN RELAY SIG	18	ORG	SP1	-
31	85	GND	18	BLK	SP4	-
32	B	SFTY INTERLOCK OUT	18	GRY	37	2
33	A	SFTY INTERLOCK PWR	18	YLW	45	-
33	B	SFTY INTERLOCK OUT	18	GRY	46	-
34	-	GND	10	BLK	SP4	-
35	C	DIODE CATHODE	18	BLU	SP9	-
35	A	DIODE ANODE	18	YLW	SP10	-
36	C	DIODE CATHODE	18	GRN	SP8	-
36	A	DIODE ANODE	18	YLW	SP10	-
37	3	BRAKE SIG	18	GRY	SP11	-

Wiring Schematic - 43028

37	7	GND	18	BLK	SP4	-
39	A	BRAKE SIG	18	GRY	SP11	-
39	B	BRAKE GND	18	BLK	SP4	-
40	C	DIODE CATHODE	18	GRY	SP11	-
40	A	DIODE ANODE	18	BLK	SP4	-
41	C	DIODE CATHODE	18	GRY	SP11	-
41	A	DIODE ANODE	18	BLK	SP4	-
42	C	DIODE CATHODE	18	GRY	SP11	-
42	A	DIODE ANODE	18	BLK	SP4	-
43	A	FLOW DIVERTER	18	GRY	SP11	-
43	B	FLOW DIV GND	18	BLK	SP4	-
44	-	KEY POWER	10	RED	SP2	-

SPICE CIRCUITS					
SPICE	WIRE DESCRIPTION	GAUGE	COLOR	CONNECTED TO	
SP1	FUSE POWER	16	ORG	1-B2, 1-C2, 1-C4, 1-A6, 1-A4,2,4,31-86	
SP2	KEY POWER	10	RED	1-B3, 5, 44	
SP3	WARNING LAMP PWR	16	WHT	1-C3, 14-1, 22, 24, 26	
SP4	GROUND		BLK	3, 17, 18-1, 19-B, 20-C, 28-86, 30-B, 31-85, 34, 37-7, 39-B,40-A, 41-A, 42-A, 43-B	
SP5	PRE HEAT	14	RED/WHT	6, 7, 21	
SP6	START SIG	16	BRN	10, 20-2, 28-30	
SP7		18			
SP8	OIL PRES	18	GRN	11, 23, 36-C	
SP9	WTR TEMP	18	BLU	13, 25, 35-C	
SP10	WARNING ALARM OUT	18	YLW	14-2, 35-A, 36-A	
SP11	BRAKE SIG	18	GRY	28-85, 30-A, 37-3, 39-A, 40-C, 41-C, 42-C,43-A	

Common Wear Parts

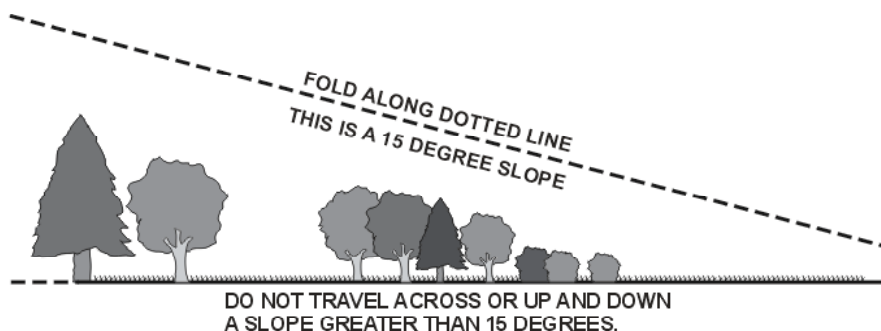
REPLACEMENT PARTS		
DESCRIPTION	PART#	Qty
Ignition Switch w/Key	M29211-935	1
Ignition Key	M29211-929	1
Male Quick Connect	806796	1
Female Quick Connect	806795	1
Platform Spring	M24741-188	2
Fuel Cap	M26849-194	1
Safety Tether Switch w/ Actuator	41754	1
Safety Tether Switch Strap	804787	1
Wrist Strap for Safety Tether Switch	801309	1

MANUALS	
DESCRIPTION	PART#
Parts	PM385DCE-21
Operator Service Maintenance	OSM385DCE-21
Operator Booklet	OB385DCE-21

FILTERS & FILTER KITS		
DESCRIPTION	PART#	Qty
Engine Oil Filter	M29295-045	1
Fuel Filter Element	M29211-107	1
Outer Air Filter	780270	1
Filter-Secondary Air Element	M29135-772	1
Hydraulic Filter Element In-Tank	M26838-326	1
Machine Filter Kit (Includes Filters+ Engine Oil)	43616	1

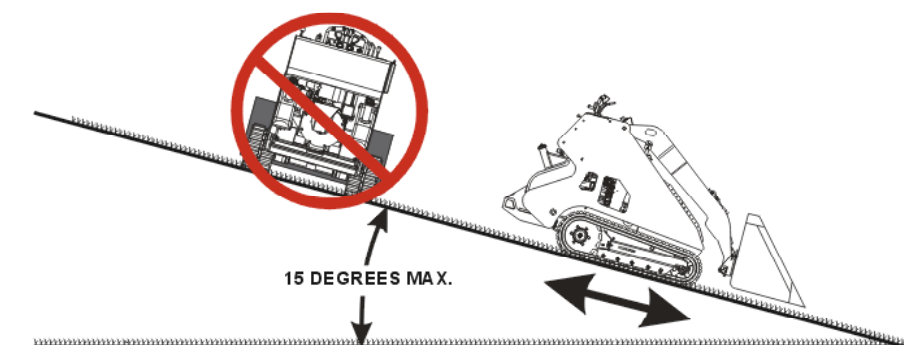
TRACK ASSEMBLY PARTS		
DESCRIPTION	PART#	Qty.
Front Idler Assembly LH	M4009-803	1
Front Idler Assembly RH	M40040-803	1
Front Idler Repair Kit	M29834-703	1
Mid-Wheel	M29510-520	6
Mid-Wheel Repair Kit	M29834-704	1
Drive Sprockett	M30109-803	2
Rubber Track	M29510-401	2

Common Wear Parts



SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION OF A COMPACT UTILITY LOADER WITH AN ATTACHMENT.

DO NOT REMOVE THIS PAGE FROM THE MANUAL.



⚠ WARNING

- To avoid serious injury, operate your unit up and down the face of slopes.
- Travel across slopes with great caution.
- Do not operate on slopes greater than 15 degrees.
- Make turns gradually to prevent tipping or loss of control.
- Exercise extreme caution when changing direction on slopes.
- Control of the machine may be affected by installed attachments.
- Reduce travel speed on slopes.
- Read and understand all Warnings and Operating Instructions in the Operator's Manual.

1. Fold this page along dotted line indicated above. DO NOT remove the page from the manual.
2. Hold page before you so that its left edge is vertically parallel to a tree trunk or other upright structure.
3. Sight across the fold in the direction of the hill slope you want to measure.
4. Compare the angle of the fold with the slope of the hill.

RAYCO WARRANTY CERTIFICATE

A. General Outline

Rayco Manufacturing, Inc. warrants to the first user that the products it supplies will be free from defects in material and workmanship under normal and proper usage for a period of 365 days from the date of delivery to the first user. In addition, with respect to "Mini Work-Force" models, the mainframe and control bar will be free from defects in material and workmanship under normal and proper usage for a period of two (2) years from said date of delivery.

This warranty does not cover and Rayco makes no warranties with respect to (i) any product that has been subject to abuse, misuse, misapplication, neglect, alteration or accident; to improper or incorrect repair or maintenance; or to abnormal conditions of use, temperature, moisture, dirt or corrosive matter; and (ii) any material, parts or other components that are manufactured by someone other than Rayco, which items carry only the manufacturer's warranty, if any. Furthermore, this warranty does not cover expendable parts.

Individual components such as engines, engine drive systems, batteries, and hydraulic components, etc. shall be covered by standard warranties of their respective manufacturers. Any claims must be submitted within 30 days of the repair.

B. Individual Components

1. Engines

All engines have specific warranties issued by OEM and honored thru their respective dealer.

2. Hydraulic Components

Hydraulic components have variable warranties. Rayco must preauthorize all hydraulic component product warranties prior to removal from the machine, and all warranty considerations are the sole responsibility of the manufacturer.

3. Batteries

Batteries have a warranty that is honored thru manufacturer. For warranty service, the purchaser is to contact manufacturer directly.

4. Various Components

- a. Belts will be covered under warranty only if Rayco receives warranty from their supplier.
- b. Sprockets Sheaves have a six month limited warranty.
- c. Electric clutches have a six month limited warranty.
- d. Hydraulic Cylinders will be covered under warranty only if Rayco receives warranty from their supplier.

5. Pockets and Teeth

Pockets and Teeth will be covered under warranty only if they are defective before they are mounted on a stump grinder. Once they are used, all warranty stops.

C. Items not Covered

Rayco is not responsible for the following:

1. Premiums charged for overtime labor requested by the purchaser.
2. Transporting the product to and from the place at which warranty work is performed.
3. Any product that has been altered or modified in ways not approved by Rayco.
4. Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow operating instructions, misuse, lack of proper protection during storage, or accident.

D. Unapproved Service Modification

Rayco is relieved of its obligation under this warranty if:

1. Service (other than normal maintenance and replacement of service items) is performed by someone other than an authorized Rayco dealer; or
2. The product is modified or altered in ways not approved by Rayco.

RAYCO WARRANTY CERTIFICATE

E. Obtaining Warranty Service

To obtain performance of this warranty, the original retail purchaser must request warranty service from a Rayco dealer authorized to sell the product to be serviced. When making such a request, the purchaser must present evidence of the product's delivery date, make the product available at the dealer's place of business, and inform the dealer in what way the purchaser believes the product to be defective.

Warranty repairs can be made in the field if the purchaser and servicing dealer so desire. However, travel time expense to and from the job site will be purchaser or dealer responsibility.

If you have a situation where you are not sure if a component is covered under warranty, please do not hesitate to contact us. Rayco wants you and your customer to be 100% satisfied with our products and service.

F. No Implied Warranty or Other Representation

Where permitted by law, neither Rayco nor any company affiliated with it makes any warranties, representations or promises, expressed or implied, as to the quality or performance, or freedom from defect of its products other than those set forth above, and **NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS IS MADE.**

G. Limitation of Purchaser's Remedies

Where permitted by law, the purchaser's only remedies in connection with the branch of performance on any warranty on any Rayco product are those set forth on this page. In no event will the dealer and or Rayco be liable for incidental or consequential damages, including but not limited to: loss of profits, rental of substitute equipment, or other commercial loss.

H. No Dealer Warranty

The selling dealer makes no warranty of his own on any item warranted by Rayco, and makes no warranty on other items unless he delivers to the purchaser a separate written warranty certificate specially warranting the item. A dealer has no authority to make any representation to promise on behalf of Rayco, or to modify the terms or limitations of this warranty in any way.

Read and understand all instructions before attempting to operate this machine. This manual should be readily available for reference at all times.

Additional copies of this manual may be purchased. Contact your Authorized Rayco Dealer or Rayco Manufacturing Inc.

RAYCO Manufacturing, LLC
4255 E Lincoln Way
Wooster, OHIO 44606 U.S.A.
800.392.2686
raycomfg.com

Think Smart, Think Safe.....

We care about your safety. When operating your RAYCO® machinery always wear an approved helmet complete with ear muffs, face shield and the proper eye wear. Never operate under the influence of alcohol or drugs. Know your RAYCO, read and understand your owner's manual cover to cover.

RAYCO Manufacturing Inc. retains the right to make changes in design and specifications; engineering; add or remove features; add improvements; or discontinue manufacturing at any time without notice or obligation.

Thank you for buying and using RAYCO Equipment.

