



OWNER'S MANUAL

FRF CARRIER

OPERATION,

MAINTENANCE & PARTS

NOTE: MANUAL including SPECIFICATIONS, subject to change without notice. All ratings specified are based on structural factors only, not vehicle capacities or capabilities.

CENTURY®

Miller Industries Towing Equipment Inc. PA OPERATIONS Hermitage, PA

FORM NO. 05002243 08/2019 PRICE \$25.00

LIMITED WARRANTY

MILLER INDUSTRIES TOWING EQUIPMENT INC., hereinafter referred to as MILLER, warrants to the original purchaser that each new MILLER Carrier will be free from defects in material and workmanship for a period of one (1) year from the date of purchase. The purchaser must promptly notify MILLER in writing of any failure in material or workmanship. In no event shall such notification be received by MILLER later than twelve (12) months from date of delivery.

The obligation under this warranty, statutory or otherwise, is limited to the repair or replacement at our factory, or at a point designated by us, of such part or parts as shall appear to us upon inspection to be defective in material or workmanship. New or remanufactured parts will be used for any replacement.

This warranty does not obligate MILLER to bear the cost of labor or transportation charges in connection with the replacement or repair of any parts found to be defective, nor shall it apply to a product upon which repairs or alterations have been made unless authorized by us.

MILLER shall in no event be liable for any incidental or consequential damages or contingent arising out of the failure of any parts or products to operate properly. NO IMPLIED, EXPRESS, OR STATUTORY WARRANTY OTHER THAN STATED HEREIN IS MADE OR AUTHORIZED TO BE MADE BY OR FOR US, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

MILLER makes no warranty, express or implied, as to finished products manufactured or supplied by another manufacturer or supplier by MILLER to purchaser, including, but not limited to, any vehicle to which a MILLER product may be affixed or accessories or wire rope (cable), and expressly disclaims any implied warranties of merchantability or fitness for a particular purpose as to such equipment or products. This language shall in no way affect or diminish the rights of purchaser to rely on such warranties as are extended by such manufacturers or suppliers.

MILLER, whose policy is one of continuous improvement, reserves the right to improve its product through changes in design or materials as it may deem desirable without being obligated to incorporate such changes in products of prior manufacture.

IT IS EXPRESSLY UNDERSTOOD THAT THERE IS NO IMPLIED WARRANTY THAT MILLER CARRIERS SHALL BE FIT FOR THE PURPOSE OF LIFTING OR MOVING PERSONS OR OTHER IMPROPER USE. THIS WARRANTY IS NOT TRANSFERABLE.



Miller Industries Towing Equipment Inc. PA Operations Hermitage, PA 16148 SERIAL NUMBER

This Section is provided by the manufacturer for the purpose of ordering any component part of the **Industrial FRF Series Carrier** that may be required when part replacement is necessary. Be certain to use only original equipment replacement parts for warranty purposes as well as for keeping your **Industrial FRF Series Carrier** in its original state and optimum operating capacities.

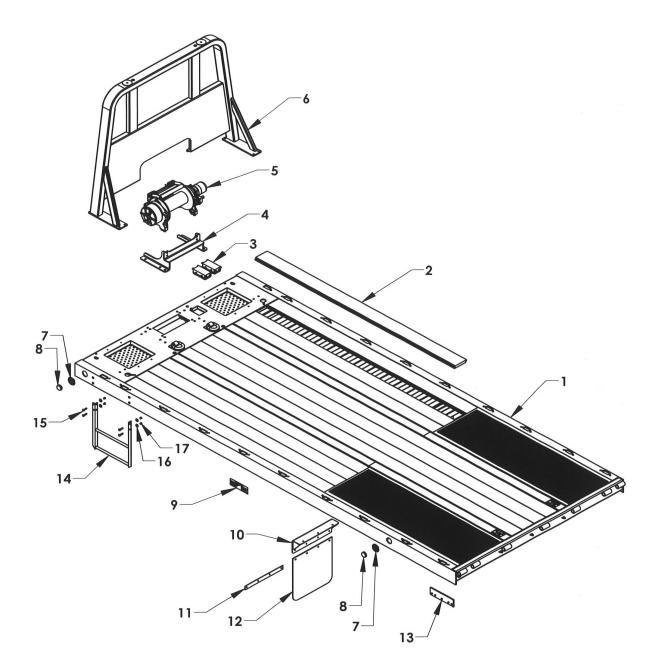
When ordering replacement or spare parts be sure to provide the following information to your carrier manufacturer authorized representative.

- 1. Manual Number & Date of Publication
- 2. Manual Page Number
- 3. Page Title
- 4. Reference Number of Part Desired
- 5. Part Number
- 6. Part Description
- 7. Quantity of Part Desired

Providing this information will help ensure that the correct parts will be delivered to you in an expedient manner without delay. Should additional information be required for repair or replacement of certain components, contact **Miller Industries, Hermitage, PA, Phone: 724-981-3328**.

The Manufacturer reserves the right, without notice or obligation, to improve or modify their products, which may change the specifications, models and feature availability.

Section VI - PARTS (cont'd) FRF FRONT DECK - STAR DECKING

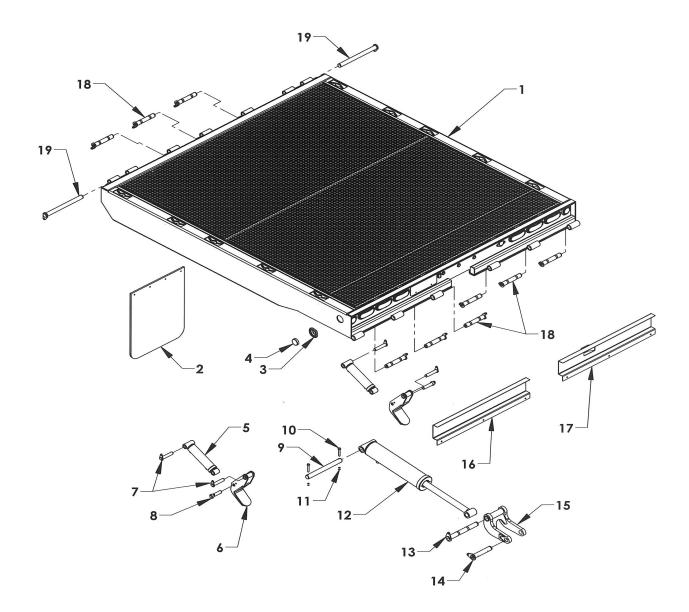


Section VI - PARTS (cont'd) FRF FRONT DECK - STAR DECKING

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0809834-SD-XXX	FRF FRONT DECK WELDMENT - STAR DECKING
2	21	RAWOD	APITONG WOOD
3	2	0303385	10 POST JUNCTION BOX
4	1	31060	WARN 20-30 XL OVERWIND MTG FRAME.
5	1	7112014	20K PLANETARY WINCH
6	1	35FL0XX	CAB PROTECTOR
7	4	0311516	2-1/2 MARKER LIGHT GROMMET
8	4	0311513	2-1/2 AMBER MARKER LIGHT
9	1	AA078	FRF OPERATIONS INSTRUCTIONS DECAL
10	2	0809854	FRF SPLASH GUARD ANGLE WELDMENT
11	2	0750340	MUDFLAP BACKING BAR
12	2	A1030	CHEVRON MUDFLAP
	2	0308419	CENTURY MUDFLAP
13	6	0752139P	FRF FRAME MTG PLATE - PETERBILT
	6	0752139F	FRF FRAME MTG PLATE - FREIGHTLINER
	6	0752139M	FRF FRAME MTG PLATE - MACK
14	1	080977	SIDE MOUNT BOLT ON LADDER
15	4	04000866	BOLT, FSCS, 1/2-13 UNC x 2 SS
16	4	0400496	WASHER USS FLAT 1/2
17	4	0400408	NUT, NYLON HEX 1/2-13 UNC

Section VI - PARTS (cont'd) FRF MIDDLE DECK - STAR DECKING

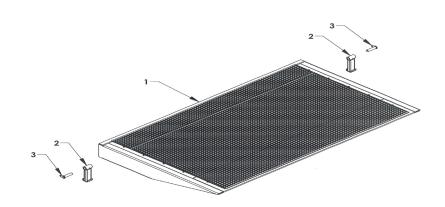




Section VI - PARTS (cont'd) FRF MIDDLE DECK DECK - STAR DECKING

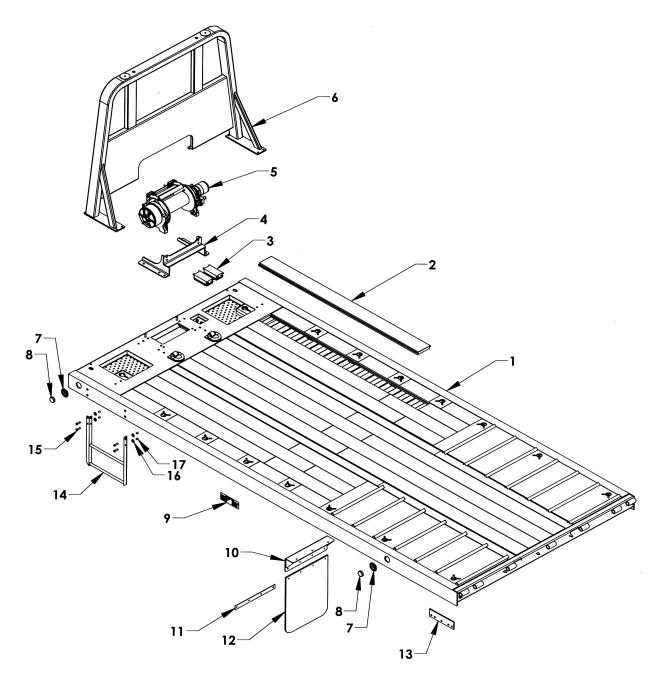
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0809803-SD	FRF PIVOT DECK WELDMENT - STAR DECKING
2	2	A1030	CHEVRON MUDFLAP
	2	0308419	CENTURY MUDFLAP
3	2	0311516	2-1/2 MARKER LIGHT GROMMET
4	2	0311512	2-1/2 RED MARKER LIGHT
5	2	72A250053	FRF TAIL LOCK CYLINDER
6	2	0809817	TAIL LOCK WELDMENT
7	4	0809828U	KEEPER PIN WELDMENT .980 x 5.0625
8	2	0809829U	KEEPER PIN .098 x 4.500
9	1	0751806U	FRF FOLD CYLINDER BASE PIN 1.480 x 15.25
10	2	0403149	BOLT, HEX 1/2-1/3 UNC x 3
11	2	0400408	NUT, NYLON HEX 12-13 UNC
12	1	72A500183	FRF TAIL FOLD CYLINDER
13	1	0809821	CURVED LINK KEEPER PIN
14	1	0809822U	KEEPER PIN 1.480 x 8.188
15	1	0809832	FRF TAIL FOLD CURVED LINK
16	1	0751922L	FRF TAIL LIGHT WIRE GUARD - LEFT
17	9	0809843R	FRF WIRE GUARD WITH TRAILER PLUG
18	2	0940411	FRF DUAL BUSHING HINGE PIN GROUP
19	2	0809810	FRF OUTER HINGE PIN

Section VI - PARTS (cont'd) FRF APPROACH TAIL - STAR DECKING



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0751820	FRF APPROACH TAIL WELDMENT - STAR DECKING
2	2	0809816	TAIL SUPPORT WELDMENT
3	2	0809829U	KEEPER PIN .980 x 4.5

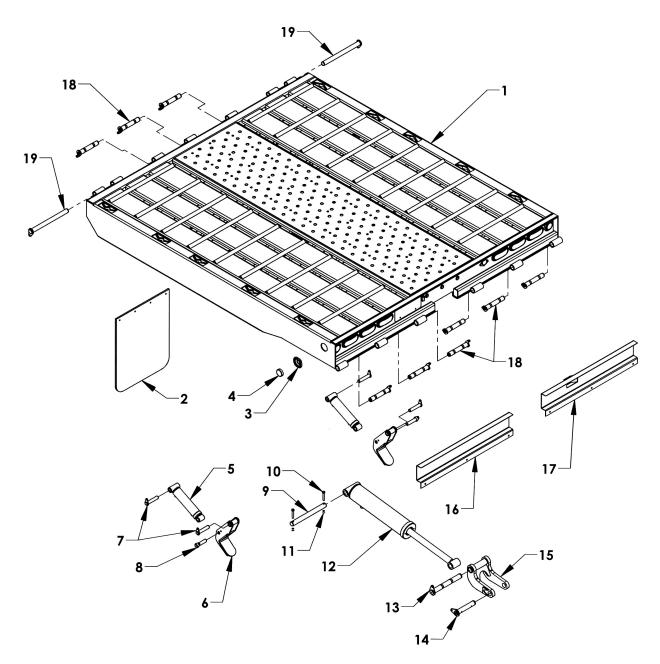
Section VI - PARTS (cont'd) FRF FRONT DECK - DOZER CLEATS



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REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0809834-DC-XXX	FRF FRONT DECK WELDMENT - DOZER CLEATS
2	21	RAWOD	APITONG WOOD
3	2	0303385	10 POST JUNCTION BOX
4	1	31060	WARN 20-30 XL OVERWIND MTG FRAME.
5	1	7112014	20K PLANETARY WINCH
6	1	35FL0XX	CAB PROTECTOR
7	4	0311516	2-1/2 MARKER LIGHT GROMMET
8	4	0311513	2-1/2 AMBER MARKER LIGHT
9	1	AA078	FRF OPERATIONS INSTRUCTIONS DECAL
10	2	0809854	FRF SPLASH GUARD ANGLE WELDMENT
11	2	0750340	MUDFLAP BACKING BAR
12	2	A1030	CHEVRON MUDFLAP
	2	0308419	CENTURY MUDFLAP
13	6	0752139P	FRF FRAME MTG PLATE - PETERBILT
	6	0752139F	FRF FRAME MTG PLATE - FREIGHTLINER
	6	0752139M	FRF FRAME MTG PLATE - MACK
14	1	080977	SIDE MOUNT BOLT ON LADDER
15	4	04000866	BOLT, FSCS, 1/2-13 UNC x 2 SS
16	4	0400496	WASHER USS FLAT 1/2
17	4	0400408	NUT, NYLON HEX 1/2-13 UNC

Section VI - PARTS (cont'd) FRF MIDDLE DECK - DOZER CLEATS

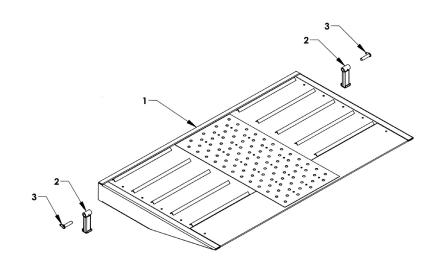


VI-9

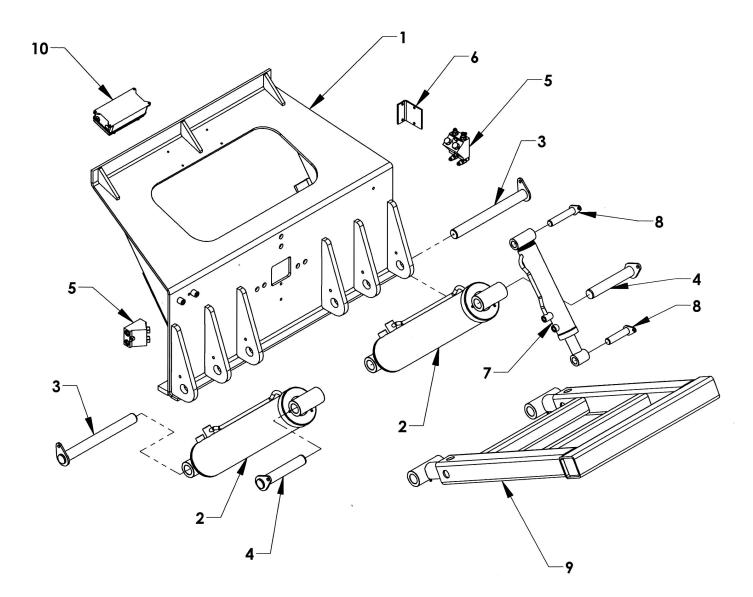
Section VI - PARTS (cont'd) FRF MIDDLE DECK - DOZER CLEATS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0809803	FRF PIVOT DECK WELDMENT - DOZER CLEATS
2	2	A1030	CHEVRON MUDFLAP
-	2	0308419	CENTURY MUDFLAP
3	2	0311516	2-1/2 MARKER LIGHT GROMMET
4	2	0311512	2-1/2 RED MARKER LIGHT
5	2	72A250053	FRF TAIL LOCK CYLINDER
6	2	0809817	TAIL LOCK WELDMENT
7	4	0809828U	KEEPER PIN WELDMENT .980 x 5.0625
8	2	0809829U	KEEPER PIN .098 x 4.500
9	1	0751806U	FRF FOLD CYLINDER BASE PIN 1.480 x 15.25
10	2	0403149	BOLT, HEX 1/2-1/3 UNC x 3
11	2	0400408	NUT, NYLON HEX 12-13 UNC
12	1	72A500183	FRF TAIL FOLD CYLINDER
13	1	0809821	CURVED LINK KEEPER PIN
14	1	0809822U	KEEPER PIN 1.480 x 8.188
15	1	0809832	FRF TAIL FOLD CURVED LINK
16	1	0751922L	FRF TAIL LIGHT WIRE GUARD - LEFT
17	9	0809843R	FRF WIRE GUARD WITH TRAILER PLUG
18	2	0940411	FRF DUAL BUSHING HINGE PIN GROUP
19	2	0809810	FRF OUTER HINGE PIN
		1	

Section VI - PARTS (cont'd) FRF APPROACH TAIL - DOZER CLEATS



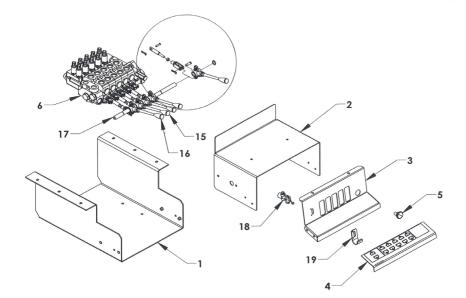
REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0809811	FRF APPROACH TAIL WELDMENT - DOZER CLEATS
2	2	0809816	TAIL SUPPORT WELDMENT
3	2	0809829U	KEEPER PIN .980 x 4.5

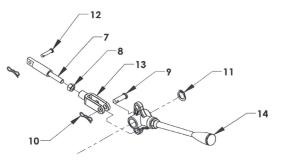


Section VI - PARTS (cont'd) FRF MIDDLE DECK LIFT CYLINDERS AND STIFF LEG

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0809815	BASE PLATE WELDMENT
2	2	72A500205	FRF DECK LIFT CYLINDER
3	2	0809830U	GREASABLE KEEPER PIN 1.480 x 15.125
4	2	0809836	KEEPER PIN - PIVOT DECK LIFT CYLINDER ROD
5	2	74345	DUAL COUNTERBALANCE VALVE
6	1	0751889	COURNTERBALANCE VALVE BRACKET
7	1	72A25009	FRF CENTER LOCK CYLINDER
8	2	0809828U	KEEPER PIN WELDMENT .980 x 5.0625
9	1	0940331	FRF STIFF LEG ASSEMBLY
10	1	0303385	10 POST JUNCTION BOX

Section VI - PARTS (cont'd) CONTROL COMPONENTS

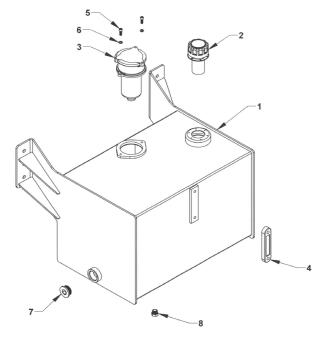




FRF CONTROL STATION

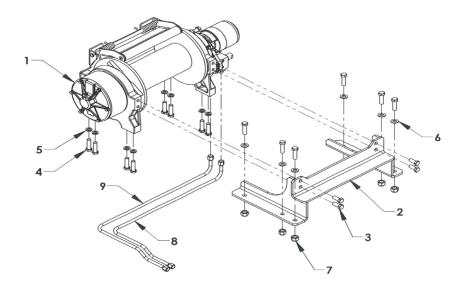
REF.	NO. REQ'D	PART NUMBER	DESCRIPTION
110.		NONDER	DECOMINATION
1	1	181621	FRF CONTROL BOX
2	1	181613	FRF CONTROL BOX HOOD
3	1	181611	FRF CONTROL PANEL
4	1	18233	FRF CONTROL PLACARD
5	1	0320031	CONTROL STATION LIGHT - 2 WIRE
6	1	74115EH-5M5	5-SPOOL VALVE - GRESEN V20
7	1	7A505250	FRF CONTROL ROD
8	1	83215	NUT, HEX 3/8-24 UNC
9	1	84620	CLEVIS PIN 3/8 x 1-1/8
10	5	0403067	PIN, 1/4-3/8 BOWTIE COTTER
11	5	86075E	SNAP RING 3/4 EXTERNAL
12	5	84611	CLEVIS PIN - 1/4 x 29/32
13	5	84530	CLEVIS , RH GFN, 3/8-24 UNF
14	5	7A1160-BL	CONTROL HANDLE ASSEMBLY - BLUE
15	5	7A1160-GN	CONTROL HANDLE ASSEMBLY - GREEN
16	5	7A1160-RD	CONTROL HANDLE ASSEMBLY - RED
17	5	7A5753-17	CONTROL HANDLE CROSS ROD - 3/4 X 17
18	5	71716	AIR SWITCH FLIPPER VALVE
19	2	18145	AIR SWITCH GUARD

FRF OIL TANK



REF	PART #	DESCRIPTION	QPU
1	76207C	OIL TANK RESERVOIR WELDMENT - FRF	1
2	7621	FILLER BREATHER CAP ASSEMBLY	1
3	76270	IN-TANK FILTER ASSEMBLY #16 SAE PORT	1
	76271	REPLACEMENT FILTER ELEMENT	1
4	762090	SIGHT GAUGE	1
5	04001427	BOLT, SHCS 5/16-18 UNC x 7/8	2
6	0400464	LOCK WASHER 5/16	2
7	03012329	#20 O-RING PLUG 3/4 SOCKET	1
8	03006085	#8 O-RING PLUG	1

Section VI - PARTS WARN 20 XL PLANETARY WINCH



REF	PART #	OTY	DESCRIPTION
1	7112014	1	WARN SERIES 20XL PLANETARY WINCH
2	31060	1	DRUM SUPPORT CROSSBAR
3	0400252	4	BOLT HHCS 5/8-11 UNC x 1-1/2 GR5
4	0403141	14	BOLT HHCS 5/8-11 UNC x 2-1/4 GR8
5	0400508	8	LOCK WASHER 5/8
6	0400505	6	FLAT WASHER 5/8
7	0400421	6	NYLON LOCK NUT 5/8
8	343046	1	20 LCG WINCH FLUID TUBE INNER
9	343050	1	20 LCG WINCH FLUID TUBE OUTER



REF. NO.	PART NUMBER	DESCRIPTION
1	0311498	LIGHT 6" OVAL RED LED - STOP/TURN
2	0311500	LIGHT 6" OVAL REVERSE LED
3	3011503	LIGHT 6" GROMMET



REF. NO.	PART NUMBER	DESCRIPTION
1	0311512	LIGHT 2.5" RED REFLEX LED (MCL59RB)
2	0311513	LIGHT 2.5" AMBER REFLEX LED (MCL59AB)
3	0311516	LIGHT 2.5" GROMMET



REF. NO.	PART NUMBER	DESCRIPTION
1	0311514	LIGHT 2.5" ROUND CLEAR/RED LED MARKER LIGHT
2	0311515	LIGHT 2.5" ROUND CLEAR/AMBER LED MARKER LIGHT
3	3011516	LIGHT 2.5" GROMMET



REF. NO.	PART NUMBER	DESCRIPTION		
1	97300	CONTROL STATION LIGHT		



REF. NO.	PART NUMBER	DESCRIPTION
1	0311519	RED 3/4 LED ICC LIGHT



REF. NO.	PART NUMBER	DESCRIPTION
1	0311520	RED 3/4 LED LIGHT



REF. NO.	PART NUMBER	DESCRIPTION
1	0308491	REFLECTOR - AMBER

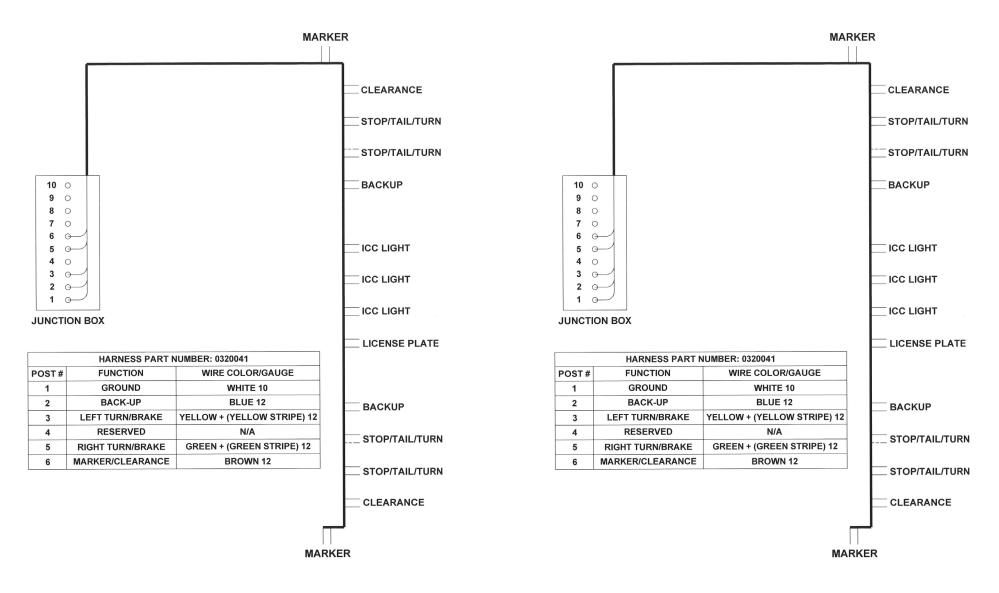


REF. NO.	PART NUMBER	DESCRIPTION
1	0308490	REFLECTOR - RED

Section VII - SCHEMATICS

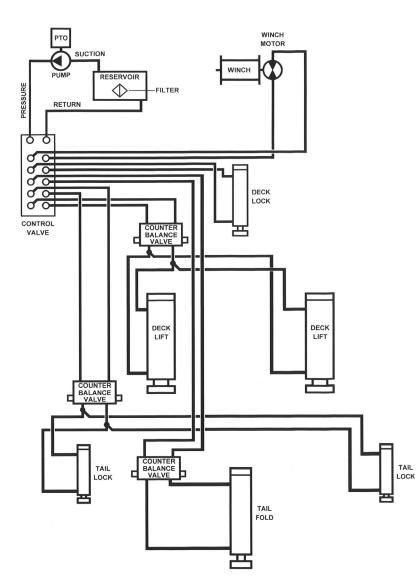
Section VII - SCHEMATICS ELECTRICAL

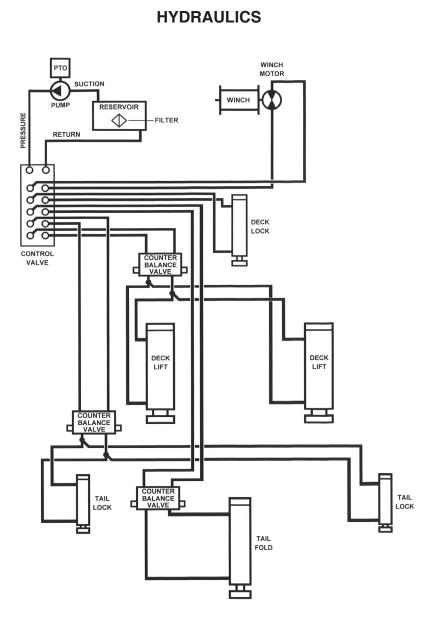
ELECTRICAL



Section VII - SCHEMATICS

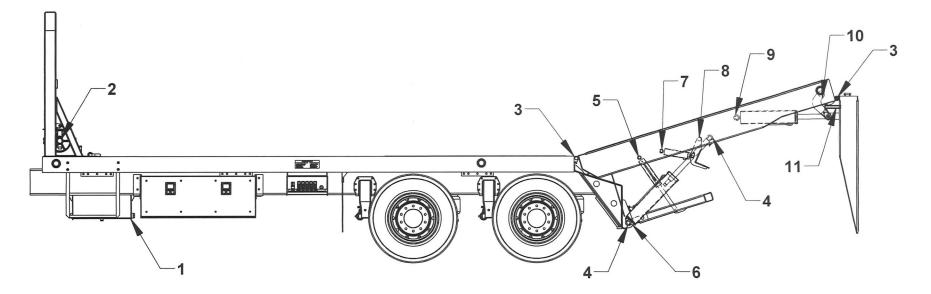
HYDRAULICS





Section VII - SCHEMATICS

FRF LUBRICATION CHART



REF NO.	DESCRIPTION	SERVICE	LUBRICANT	NUMBER OF POINTS	FREQUENCY (HOURS)
1	OIL TANK	CHANGE OIL	MULTI-PURPOSE ATF	1	1000
1	OIL TANK	CHANGE FILTER	P/N 76271	1	250 OR 6 MONTHS
2	WINCH CABLE	LUBE	OIL	1	100 OR 2 MONTHS
3	HINGE PIN	LUBE	EXTREME PRESSURE GREASE NLGI 2	17	50 OR 1 MONTH
4	DECK LIFT CYLINDER	LUBE	EXTREME PRESSURE GREASE NLGI 2	4	50 OR 1 MONTH
5	STIFF LEG CYLINDER	LUBE	EXTREME PRESSURE GREASE NLGI 2	4	100 OR 2 MONTHS
6	STIFF LEG PIVOT	LUBE	EXTREME PRESSURE GREASE NLGI 2	2	100 OR 2 MONTHS
7	TAIL LOCK CYLINDER	LUBE	EXTREME PRESSURE GREASE NLGI 2	4	100 OR 2 MONTHS
8	TAIL LOCK PIVOT	LUBE	EXTREME PRESSURE GREASE NLGI 2	2	100 OR 2 MONTHS
9	TAIL PIVOT CYLINDER	LUBE	EXTREME PRESSURE GREASE NLGI 2	4	50 OR 1 MONTH
10	TAIL PIVOT LINK	LUBE	EXTREME PRESSURE GREASE NLGI 2	3	50 OR 1 MONTH
11	TAIL SUPPORT STAND	LUBE	EXTREME PRESSURE GREASE NLGI 2	2	100 OR 2 MONTHS