MODEL UC-98/UC-108
BOOK No. 343
SERIAL No. _____

MACHINE SERIAL NUMBER

The machine serial number is on the serial number capacity plate, or on the Crane Rating Manual located inside the operator's cab. The serial number should always be furnished when ordering parts for the machine or when corresponding with the distributor or factory concerning the machine. Providing the serial number is the only way of ensuring the correct parts and/or information can be furnished.

In the event the serial number is not readable, a number is stamped on the upper revolving frame which can be used to identify the machine. On cable crane this number is located on the right hand boom foot mounting lug. On hydraulic cranes and excavators the number is stamped just below the boom hoist cylinder mounting lugs.

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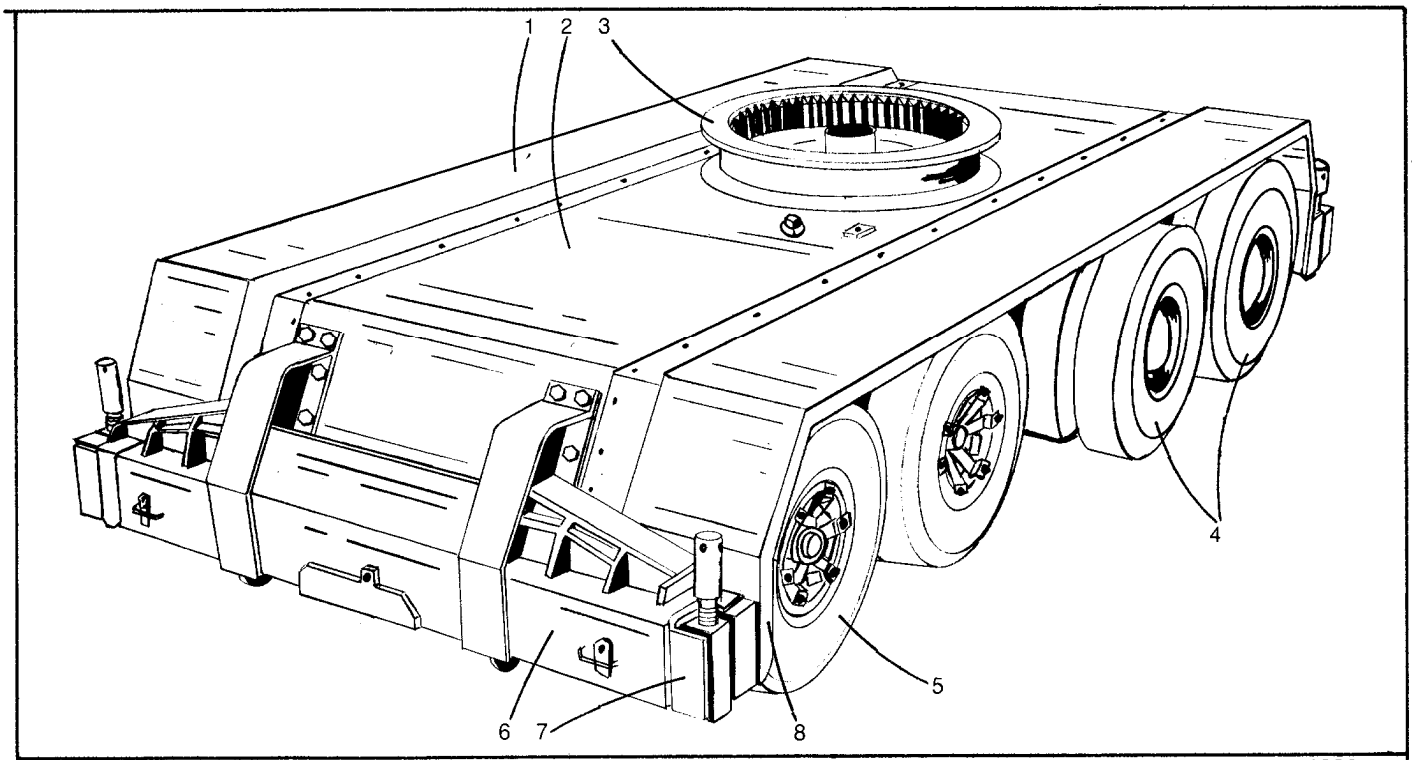

Fig. 1 A118-B
UC Lower Frame
(1) Fender
(2) Deck Plate
(3) Ring Gear
(4) Rear Axles And Wheels
(5) Front Axles And Wheels
(6) Outrigger Box
(7) Outrigger Beam
(8) Fender

Lower Frame Assembly

The UC carrier is an 8X4 rubber tire carrier, designed and manufactured by FMC Corporation. The carrier uses a number of components manufactured by vendors, that have been specified and approved by our engineering department. Lubrication and maintenance instructions for vendor items are published through cooperation with the vendor.

The UC is a self propelled rubber tire mounted machine. It is driven by the upper engine through a reverse shaft and vertical shaft arrangement much the same as in a crawler mounted machine. The machine uses truck type front and rear axles. Power is transferred to the rear axles by a transmission and drive shaft arrangement in the same manner as a truck.

The frame is heavy steel weldment, with a center pin and roller path welded to the upper frame plate. There is a steel fender bolted to each side of the lower frame. The fenders run the entire length of the lower frame. The transmission and bevel gear housing are bolted to the underside of the upper frame plate.

The steering mechanism, which is similar to a truck, is hydraulically actuated from the upper revolving frame.

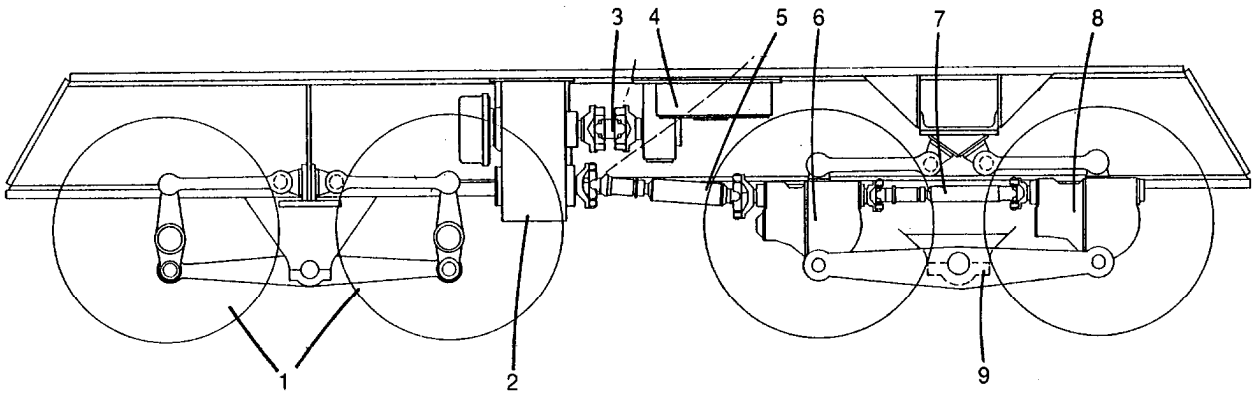

Fig. 2 A112-D
Carrier Drive Train
(1) Front Axles
(2) Transmission
(3) Drive Shaft
(4) Bevel Gear Transmission
(5) Drive Shaft
(6) Front Rear Axle
(7) Drive Shaft
(8) Rear Rear Axle
(9) Equalizer Beams

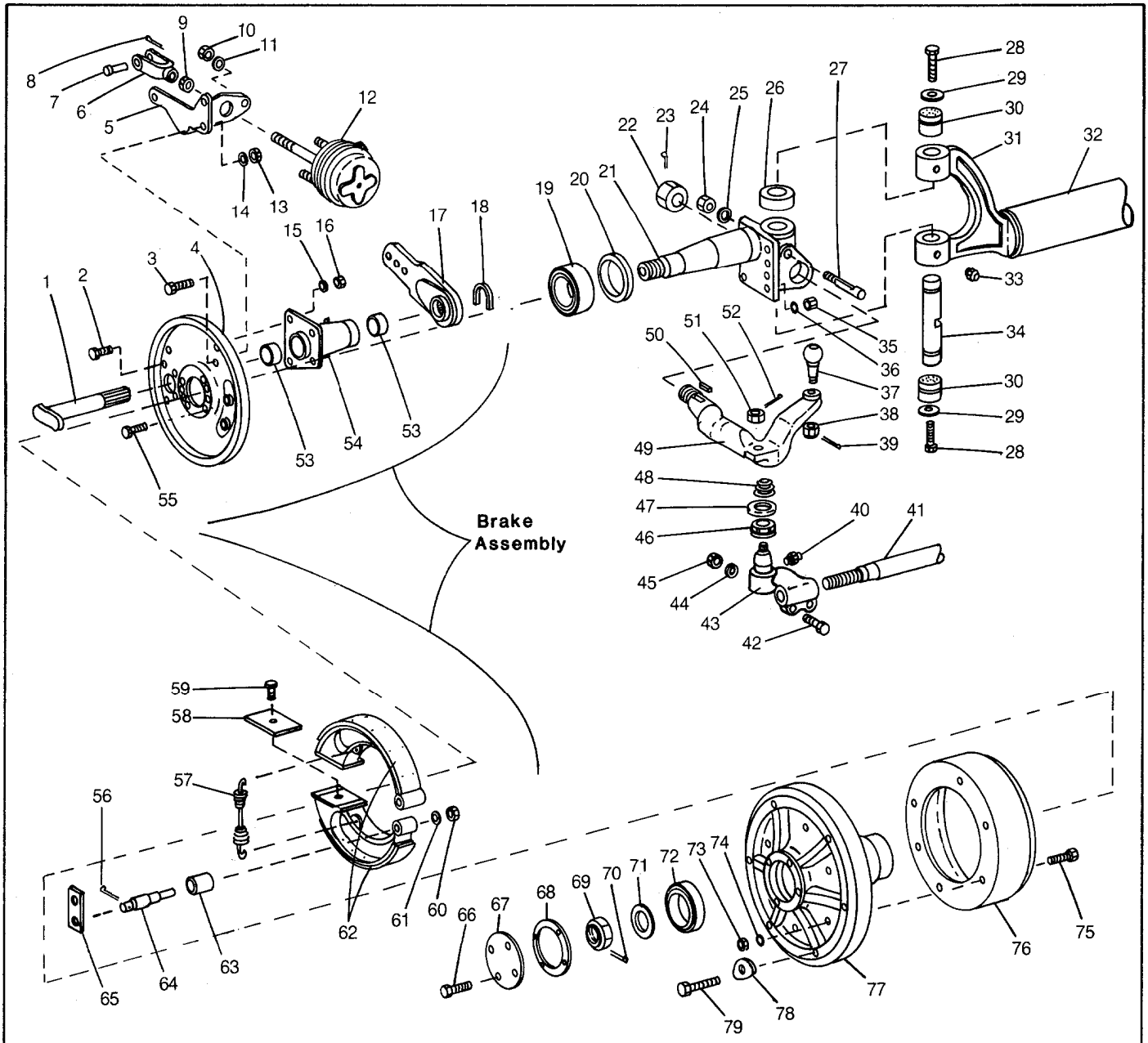

Fig. 1 NA388-B
Front Axle Disassembly

(1) Camshaft	(17) Slack Adjuster	(33) Grease Zerk	(49) Steering Arm	(65) Plate
(2) Capscrew	(18) Lock	(34) Knuckle Pin	(50) Key	(66) Capscrew
(3) Capscrew	(19) Bearing	(35) Nut	(51) Nut	(67) Hub Cap
(4) Backing Plate	(20) Grease Retainer	(36) Lockwasher	(52) Cotter Pin	(68) Gasket
(5) Bracket	(21) Steering Knuckle	(37) Ball Stud	(53) Bushing	(69) Nut
(6) Yoke	(22) Nut	(38) Nut	(54) Bracket	(70) Cotter Pin
(7) Clevis Pin	(23) Cotter Pin	(39) Cotter Pin	(55) Capscrew	(71) Spindle Washer
(8) Cotter Pin	(24) Nut	(40) Grease Zerk	(56) Cotter Pin	(72) Bearing
(9) Nut	(25) Lockwasher	(41) Cross Rod	(57) Spring	(73) Nut
(10) Nut	(26) Thrust Bearing	(42) Capscrew	(58) Wear Plate	(74) Lockwasher
(11) Lockwasher	(27) Draw Key	(43) Cross Rod End	(59) Screw	(75) Capscrew
(12) Brake Actuator	(28) Capscrew	(44) Lockwasher	(60) Nut	(76) Brake Drum
(13) Nut	(29) Dust Plug	(45) Nut	(61) Lockwasher	(77) Wheel Hub
(14) Lockwasher	(30) Bushing	(46) Washers	(62) Brake Shoe Assy.	(78) Rim Clamp
(15) Washer	(31) Axle Yoke	(47) Cover	(63) Bushing	(79) Stud & Nut
(16) Nut	(32) Axle Tube	(48) Spring	(64) Anchor Pin	

5.1 Disassembly

(a) Jack up the front end of vehicle so tires clear floor (use outrigger jacks). Block up securely at this position. Remove wheel and tire assembly (Refer to SM1-69-2.0).

WARNING

Do Not Attempt To Disassemble Or Perform Knuckle Pin Repair With Vehicle Supported By Jacks Only.

(b) Remove hub cap (67), gasket (68), cotter pin (70), nut (69) and spindle washer (71).
(c) Remove outer bearing (72).
(d) Remove wheel hub assembly (77).
(e) Remove brake actuator (12) from bracket (5).
(f) Remove brake assembly from steering knuckle (21) by removing capscrews (55).
(g) Remove cotter pin (52) and nut (51) to disassemble cross rod assembly from the steering arm (49). Remove cross rod end (43) from steering arm with a devils fork and hammer.
(h) Remove cotter pin (23), nut (24) and steering arm (49) from steering knuckle (21).

Note: It is not necessary to remove steering arm unless it requires service.

(i) Remove dust plug capscrews (28) and dust plug (29).
(j) Remove nut (24). Tap draw key (27) out by use of brass hammer on threaded end.
(k) Tap out knuckle pin (34) with a bronze drift.

Note: Do not strike the hardened steel knuckle pin directly with a steel hammer.

(l) Remove steering knuckle (21) and thrust bearing (26).

5.2 Bushing Replacement

(a) Remove axle assembly (refer to SM1-4-1.0 for axle removal) and use a press to remove and replace bushings (30).
(b) Install axle assembly.

5.3 Assembly

(a) Make sure knuckle pin holes in axle yoke (31) are clean and dry.
(b) Position and support steering knuckle (21) in axle yoke (31).
(c) Slide thrust bearing (26) between upper face of the steering knuckle (21) and axle yoke (31).
(d) Align steering knuckle hole and thrust bearing hole with axle yoke holes.
(e) Align knuckle pin "flat" to mate with draw key hole, and tap knuckle pin (34) through axle yoke (31), thrust bearing (26) and steering knuckle (21) from the top or bottom side.
(f) Install draw key (27) so the "flat" on the key mates with corresponding "flat" on knuckle pin.

Note: Before setting draw key, center knuckle pin to equalize gap between upper and lower gap mounting surfaces.

(g) Install lockwasher (25) and nut (24).
(h) Install dust plugs (29) and capscrews (28).
(i) Install steering arm (49) into steering knuckle (21), connect key (50) and tighten nut (22). Position cotter pin (23). Install cross rod assembly, tighten nut (51) and position cotter pin (52).
(j) Install brake assembly, brake actuator (refer to SM1-3-4.0 for brake service). Pack bearings (19, 72) with grease. Install bearing (19) and grease retainer (20) in wheel hub (77). Install hub on spindle.
(k) Install bearing (72), spindle washer (71), nut (69) and adjust. (Refer to SM1-2-3.0).
(l) Install gasket (68) and hub cap (67). Install wheel and tire assembly. See SM1-69-2.0.