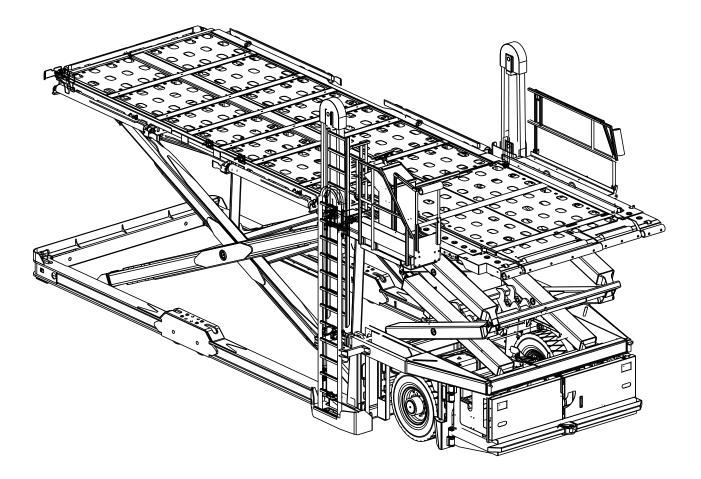


Container and Pallet Loader









IMPORTANT

This manual from JBT, Ground Support Equipment (formerly FMC Technologies, Airport Systems) contains current information regarding your equipment at time of manufacture. All references to FMC Technologies can now be replaced with the JBT contact information located on the following page.

If you have any questions, please contact our headquarters in Orlando, Florida, USA or find us on the web at www.jbtaerotech.com.

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GROUND SUPPORT AROUND THE WORLD

For assistance or questions with set-up, warranty or parts, please contact your closest JBT Sales and Service Center.

Location	Warranty and Service	Part Sales
Orlando Headquarters John Bean Technologies Corp. 7300 Presidents Drive Orlando, Florida 32809 USA	Telephones +1.407.850.4207 worldwide 1.800.327.1686 within USA +1.407.850.4221 Fax orlando.service@jbtc.com	Telephones +1.407.850.4208 worldwide 1.800.821.3019 within USA +1.407.850.4221 Fax parts.orders@jbtc.com
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Comments or suggestions regarding our manuals? At JBT Technical Publications we are always improving our technical documentation. If you have any comments or suggestions, please contact us.	Technical Publications John Bean Technologies 7300 Presidents Drive Orlando, Florida 32809 USA	+1.407.850.4205 Telephone +1.407.850.4221 Fax technical.publications@jbtc.com



OPERATION, MAINTENANCE MANUAL

INCLUDING

ILLUSTRATED PARTS LIST

EDITION 9, JUNE 2001 FOR USE WITH COMMANDER 30 LOADER

SERIAL NUMBER: CR3000016 & UP

MANUFACTURED BY

FMC CORPORATION APSD AIRLINE EQUIPMENT 7300 PRESIDENTS DRIVE ORLANDO, FLORIDA 32809 TELEPHONE: (407) 851–3377 FAX: (407) 850–4221

JUNE 2001



CONFIDENTIAL

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RECORD OF REVISIONS

LIST OF WARNINGS AND CAUTIONS USED IN THIS MANUAL

The following warnings and cautions are used in this manual. Read all of them and follow the instructions when performing the procedures. The symbol shown below is used to call your attention to some procedures that could cause death or injury to personnel and/or damage to equipment.



A WARNING MEANS THAT A PROCEDURE THAT FOLLOWS COULD CAUSE DEATH OR INJURY TO YOU OR OTHER PERSONNEL IN THE AREA IF THE PROCEDURE IS NOT FOLLOWED AS WRITTEN.

CAUTION

A CAUTION MEANS THAT A PROCEDURE THAT FOLLOWS COULD CAUSE DAMAGE TO EQUIPMENT IF THE PROCEDURE IS NOT FOLLOWED AS WRITTEN.



BEFORE STARTING ANY TYPE OF POWER UNIT, OBSERVE ALL PRECAUTIONS BELOW.

INSURE POWER MODULE TEE BOLT IS SECURELY FASTENED.

INSURE THAT ALL PERSONNEL ARE CLEAR OF LOADER.

AT BEGINNING OF SHIFT, ENSURE THAT ALL SCHEDULED SERVICES HAVE BEEN PERFORMED. THIS INCLUDES CHECK OF TIRE CONDITION, FUEL AND FLUID LEVELS, AND OVERALL CHECK FOR LOOSE OR MISSING HARDWARE, AND GENERAL CONDITION OF LOADER.

DO NOT ATTEMPT TO OPERATE THE COMMANDER 30 WITHOUT HAVING BEEN PROPERLY TRAINED IN OPERATION AND SAFETY REQUIREMENTS.

DO NOT OPERATE LOADER WHILE UNDER INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION THAT MAY PREVENT FULL ABILITY TO CONTROL LOADER.

BE ALERT AT ALL TIMES DURING LOADER OPERATION.

IT IS PERMISSABLE TO PERFORM NORMAL LOADING OPERATIONS WHILE THE AIRCRAFT IS BEING REFUELED IF FACILITY OR REGULATORY RULES DO NOT PROHIBIT AND THE OPERATOR HAS ENSURED THAT THERE ARE NO HYDRAULIC LEAKS, OR UNSAFE CONDITIONS PRESENT. CAUTION SHOULD BE TAKEN TO ASSURE THAT POSSIBLE FUEL SPILLS WILL NOT SPLASH OR DRAIN ON THE ENGINE EXHAUST SYSTEM.





WHEN USING BRIDGE TILT ENSURE ADEQUATE CLEARANCE BETWEEN LOADER AND AIRCRAFT. FAILURE TO DO SO COULD CAUSE DAMAGE TO AIRCRAFT OR LOADER.



THE COMMANDER 30 IS NOT DESIGNED FOR USE AS A TRANSPORTING VEHICLE. ANY ATTEMPT TO USE IT FOR OPERATIONS OTHER THAN CARGO TRANSFER MAY RESULT IN INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.



THE COMMANDER 30 IS DESIGNED TO BE DRIVEN ON PAVED OR CEMENT SURFACES APPROVED TO SUPPORT THE WEIGHT AND USE OF GROUND SUPPORT EQUIPMENT VEHICLES. DRIVING THE COMMANDER 30 ON OTHER THAN THESE APPROVED SURFACES COULD RESULT IN INJURY TO PERSONNEL AND SERIOUS DAMAGE TO THE VEHICLE.



DO NOT ALLOW PERSONNEL UNDER BRIDGE OR PLATFORM UNLESS ADEQUATE SUPPORTS ARE IN PLACE. FAILURE TO SUPPORT BRIDGE OR PLATFORM MAY ALLOW BRIDGE OR PLATFORM TO FALL, RESULTING IN DEATH OR INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.



USE EXTREME CAUTION WHEN WALKING ON BRIDGE OR PLATFORM AT ALL TIMES. AVOID STEPPING ON ROLLERS OR CLUSTER ROLLER ASSEMBLIES. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY OR DEATH.



USE EXTREME CAUTION WHEN WALKING IN AREAS MARKED BY STRIPED WARNING TAPE.

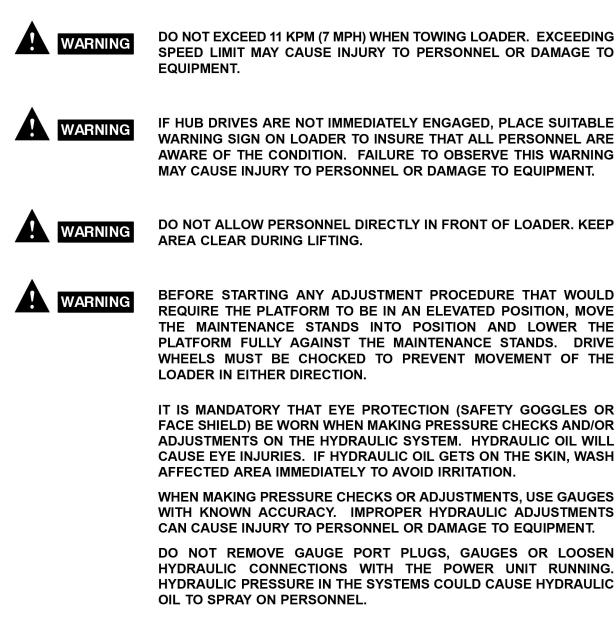


OBSERVE ALL INSTRUCTIONS IN AIRPORT OPERATIONS MANUAL WHEN DRIVING LOADER. FAILURE TO DO SO MAY RESULT IN INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.



BEFORE DISENGAGING HUB DRIVES, CHOCK BOTH DRIVE WHEELS FRONT AND BACK TO PREVENT MOVEMENT IN EITHER DIRECTION. FAILURE TO DO SO MAY RESULT IN INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.





WARNING

CHOCK BOTH DRIVE WHEELS FRONT AND BACK TO PREVENT MOVEMENT IN EITHER DIRECTION. FAILURE TO DO SO MAY RESULT IN INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.

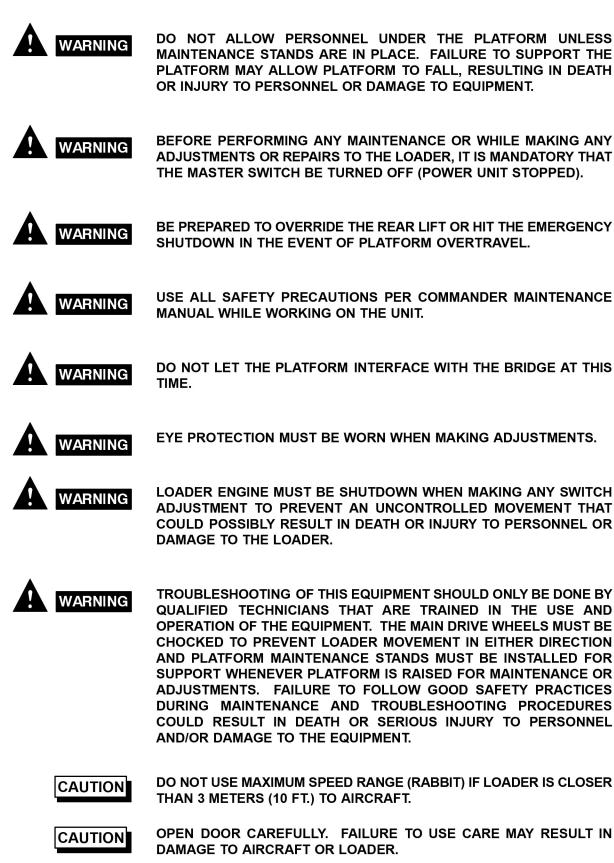


USE EYE PROTECTION AND PROTECTIVE CLOTHING RECOMMENDED BY THE MANUFACTURER OF THE WELDING EQUIPMENT YOU ARE USING.



USE EYE PROTECTION AND PROTECTIVE CLOTHING RECOMMENDED BY THE MANUFACTURER OF THE WELDING EQUIPMENT YOU ARE USING.







CAUTION FOR SHOOT-THE-GAP OPERATION, POSITION THE LOADER SO THAT RUBBER BUMPERS ON BRIDGE FACE ARE CLOSE TO BUT DO NOT TOUCH THE AIRCRAFT.

CAUTION USE EXTREME CARE TO PREVENT CONTAMINATION OF HYDRAULIC SYSTEM WHEN INSTALLING GAUGES, FITTINGS, OR REPLACING A COMPONENT. CONTAMINATION CAN RESULT IN DAMAGE TO EQUIPMENT.

> WHENEVER AN ADJUSTABLE HYDRAULIC RELIEF VALVE OR PRESSURE REDUCING VALVE IS REPLACED, REDUCE THE PRESSURE SETTING PRIOR TO STARTING THE POWER UNIT. ADJUST THE REPLACED COMPONENT TO SPECIFICATION AS OUTLINED IN THE ADJUSTMENT PROCEDURES.

- CAUTION CHECK THAT CHAIN ANCHOR HAS NOT BEEN ADJUSTED TOO FAR FORWARD AND STRIKES THE CASTING WHICH SUPPORTS THE PRIMARY CYLINDER.
- CAUTION TAG ALL SHIMS, LEFT AND RIGHT FOR REASSEMBLY.

CAUTION JUMPER WIRES SHOULD NEVER BE USED, AS AN ERROR (SHORT CIRCUIT) CAN DESTROY THE CIRCUIT BOARD.

- CAUTION DO NOT STOP POWER UNIT WITH LOADER IN POSITION TO TRANSFER CARGO. DO NOT LEAVE LOADER UNATTENDED. FAILURE TO OBSERVE THIS CAUTION MAY RESULT IN DAMAGE TO AIRCRAFT OR LOADER.
- CAUTION IT WILL BE NECESSARY TO ADJUST HEIGHT OF BRIDGE AS AIRCRAFT POSITION CHANGES DURING CARGO TRANSFER. FAILURE TO MAINTAIN ALIGNMENT OF AIRCRAFT AND BRIDGE MAY RESULT IN DAMAGE TO EQUIPMENT.
- CAUTION IT WILL BE NECESSARY TO MANUALLY ADJUST HEIGHT OF BRIDGE AS AIRCRAFT POSITION CHANGES DURING CARGO TRANSFER. FAILURE TO MAINTAIN ALIGNMENT OF AIRCRAFT AND BRIDGE MAY RESULT IN DAMAGE TO EQUIPMENT.

CAUTION CLOSE CARGO DOOR CAREFULLY, FAILURE TO DO SO MAY RESULT IN DAMAGE TO AIRCRAFT OR LOADER.

CAUTION TO PREVENT DAMAGE TO THE STABILIZER CYLINDER ASSEMBLIES, IT IS RECOMMENDED THE STABILIZERS NOT BE EXTENDED WHEN THE UNIT IS PARKED.

CAUTION LIFT UNIT ONLY ON POINTS INDICATED ON FIGURE 1. FAILURE TO USE DESIGNATED LIFT POINTS WILL RESULT IN EQUIPMENT DAMAGE.



- CAUTION DO NOT OPERATE ELECTRICAL PUMP CONTINUOUSLY FOR MORE THAN 1 MINUTE. OPERATION FOR MORE THAN 1 MINUTE WILL OVERHEAT MOTOR AND MAY CAUSE DAMAGE. IF EMERGENCY PROCEDURES CANNOT BE COMPLETED WITHIN 1 MINUTE, WAIT AT LEAST 10 MINUTES TO ALLOW MOTOR TO COOL, THEN CONTINUE.
- CAUTION ENERGIZE THE EMERGENCY POWER UNIT ONLY WHILE OTHER SWITCHES ARE TURNED ON. CONTINUOUS OPERATION WHILE NOT IN USE CAUSES THE ELECTRIC MOTOR TO OVERHEAT UNNECESSARILY.
- CAUTION CLOSE AND SECURE CARGO DOOR CAREFULLY. FAILURE TO USE CARE MAY RESULT IN DAMAGE TO AIRCRAFT OR LOADER.
- CAUTION DISCONNECT BATTERY BEFORE TOWING LOADER.
- CAUTION TOWING LOADER WITHOUT DISENGAGING HUBS WILL SERIOUSLY DAMAGE COMPONENTS.
- CAUTION IN THE EVENT OF UNIT DE-COMMISSIONING, MAJOR OVERHAUL OR SERVICING, ANY ENVIRONMENTALLY SENSITIVE MATERIALS NEED TO BE DISPOSED OF PROPERLY. PROPER DISPOSAL SHALL FOLLOW LOCAL ENVIRONMENTAL REGULATIONS AND RECOMMENDATIONS. EXAMPLES OF SUCH MATERIALS INCLUDE: RUBBER TIRES AND BELTS, BATTERIES, LUBRICANTS (MOTOR OILS AND GREASE), HYDRAULIC OIL, ALL TYPES OF GLYCOL AND FUEL.
- CAUTION PLAFFORM MAINTENANCE STANDS CAN NOT BE USED WHEN PLATFORM IS BELOW 70". INSTALL BLOCKING TO SUPPORT PLATFORM FOR SAFETY BEFORE WORKING UNDER PLATFORM.



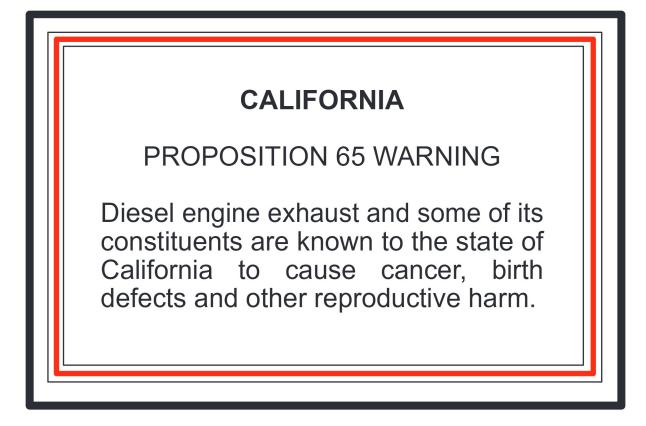




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WITH ILLUSTRATED PARTS LIST

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