

3195 FIRST USED  
ON CAR 1032  
3200 LAST USED  
ON CAR  
T-20-37  
SUPERSEDES INSTRUCTIONS (E)

# OPERATING INSTRUCTIONS

FOR

## JORDAN STANDARD TYPE SPREADER DITCHER

WITH OR WITHOUT HIGH SNOW PLOW

WHEN SPREADER DITCHER ARRIVES AT THE BEGINNING OF A JOB REMOVE SAFETY TIE ROD HOLDING WINGS IN. ALSO REMOVE BOLT USED TO SHORTEN SAFETY CHAIN CONNECTING PLOW SMALL WING AND MAIN SPREADER WING, IF CAR HAS HIGH SNOW PLOW. IF NOT, REMOVE BOLT HOLDING PLOW SMALL WING TO PLOW SIDE AND SWING PLOW SMALL WING OPEN.

ALL AIR VALVES TO BE IN NEUTRAL POSITION, AS SHOWN, BEFORE TURNING AIR INTO AIR RESERVOIR AND OPERATING MANIFOLD.

DRAIN VALVE FOR AIR RESERVOIR LOCATED AT SIDE OF CAR SHOULD BE CLOSED.

SPREADER DITCHER IS EQUIPPED WITH AN AUXILIARY AIR INTAKE LINE ON THE LEFT HAND SIDE AT REAR END OF CAR. IT IS DESIRABLE TO CONNECT A HOSE FROM THIS LINE DIRECTLY TO THE AIR RESERVOIR ON THE LOCOMOTIVE. IF THIS LINE IS USED, BE SURE CUTOUT COCK BETWEEN AIR RESERVOIR AND TRAIN LINE IS CLOSED.

IF TRAIN LINE IS USED TO SUPPLY AIR TO SPREADER RESERVOIR, AIR BRAKE ON SPREADER DITCHER SHOULD BE CUT OUT.

BEFORE OPENING CUTOUT COCK (M) TO RELEASE AIR INTO MANIFOLD, REMOVE PIPE PLUG (N) AND POUR IN HALF PINT OF LIGHT OIL. (THIS SHOULD BE DONE AT LEAST ONCE A DAY). REPLACE PLUG (N) AND OPEN COCK (M) RELEASING AIR INTO MANIFOLD. GIVE EACH VALVE A QUICK TURN IN BOTH DIRECTIONS SO THAT SMALL AMOUNT OF OIL WILL BE SPRAYED INTO EACH END OF CYLINDERS.

HAND VALVES AND FOOT VALVES FOR OPERATING RIGHT HAND WING ARE ON THE RIGHT HAND SIDE OF CAB; VALVES FOR OPERATING LEFT HAND WING ARE ON THE LEFT HAND SIDE OF CAB, EXCEPT VALVE (A) FOR FRONT PLOW WHICH IS IN THE RIGHT HAND MANIFOLD ONLY; AND EMERGENCY BRAKE VALVE WHICH IS IN THE LEFT MANIFOLD ONLY DIRECTLY OPPOSITE PLOW VALVE. FOR BEST OPERATING RESULTS ON NEW CARS USE 100\* TO 110\* OF AIR PRESSURE.

### TO OPERATE FRONT PLOW

TO LOWER PLOW MOVE VALVE HANDLE (A)

FORWARD TO RAISE PLOW CROSSHEAD OFF PINS.

REMOVE PINS AND REPLACE IN HOLES TO SUIT DESIRED PLOWING DEPTH BELOW TOP OF RAIL, ALSO ADJUST RAIL SHOES ON PLOW BLADES TO CLEAR RAIL ABOUT  $\frac{1}{2}$ ". MOVE VALVE HANDLE (A) BACKWARD TO LOWER PLOW CROSSHEAD TO ADJUSTMENT PINS THEN RETURN HANDLE TO NEUTRAL POSITION.

### TO OPERATE DITCHER WINGS

MOVE VALVE HANDLE (B) FORWARD TO RAISE

SPREADER DITCHER WING CROSSHEAD OFF PINS IN MAIN POST. REMOVE PINS AND REPLACE IN HOLES TO SUIT DESIRED SPREADING DEPTH. STEP ON FOOT PEDAL (G) TO RELEASE LOCK ON DIAGONAL BRACE AND AT THE SAME TIME STEP ON FOOT PEDAL (H) TO RELEASE LOCKS ON HORIZONTAL WING BRACES. MOVE DIAGONAL BRACE VALVE HANDLE (C) FORWARD TO RAISE SPREADER DITCHER WING OFF WING REST. MOVE OPENING AND CLOSING CYLINDER VALVE HANDLE (D) FORWARD SLOWLY. (IF WING OPENS TOO FAST REVERSE VALVE HANDLE TO CUSHION AIR CYLINDER THEREBY PREVENTING WING FROM COMING TO A CRASH STOP). OPEN WING TO DESIRED SPREADING ANGLE. (DO NOT WORK SPREADER WING AT AN ANGLE LESS THAN 25° FROM SIDE OF CAR). MOVE DIAGONAL BRACE VALVE HANDLE (C) BACKWARD TO LOWER OUTER END OF SPREADER DITCHER WING TO THE DESIRED SLOPE. WHEN THIS IS OBTAINED, QUICKLY RELEASE FOOT PEDAL (G) TO LOCK DIAGONAL BRACE. STEP ON FOOT PEDAL (J) TO RELEASE BANK SLOPER WING LOCK PIN, ALSO FOOT PEDAL (H) TO RELEASE LOCKS ON HORIZONTAL WING BRACES. MOVE VALVE HANDLE (E) FORWARD TO RAISE BANK SLOPER WING OFF OF LOCK PIN, WHEN LOCK PIN RELEASES MOVE VALVE HANDLE (E) BACKWARD TO RELEASE AIR FROM CYLINDER SO BANK SLOPER WING WILL LOWER. WHEN BANK SLOPER WING REACHES THE DESIRED OPERATING SLOPE RELEASE FOOT PEDAL (J) TO LOCK WING. MOVE VALVE HANDLE (A) BACKWARD

UNTIL WING ALMOST TOUCHES THE GROUND. WITH SPREADER DITCHER WING AT THE DESIRED OPERATING ANGLE FROM THE SIDE OF CAR, REMOVE FOOT FROM PEDAL (H) THUS LOCKING ALL HORIZONTAL WING BRACES. SIGNAL LOCOMOTIVE ENGINEER FOR FORWARD MOVEMENT OF SPREADER. AS SPREADER BEGINS FORWARD MOTION, MOVE VALVE HANDLE (B) BACKWARD TO LOWER WING INTO THE EARTH AND THE CROSSHEAD ONTO THE PIN, SET AT THE DESIRED DITCHING DEPTH.

TO CLOSE WINGS, REVERSE ABOVE OPERATIONS.

### CARRIER WING FORM

TO CARRY OR DRAG MATERIAL FROM CUTS, FOLD MAIN WING TO SIDE OF CAR. DISCONNECT REAR BRACE FROM WING AND SECURE TO REST WITH SAFETY CHAIN. OPEN MAIN WING AND LOWER MAIN WING AND BANK SLOPER WING TO LEVEL POSITION. DISCONNECT LIFTING CABLE ALSO REMOVE BOLT HOLDING BANK SLOPER WING TO PIVOT HINGE AND SWING WING FORWARD TO FACE OF DITCHER WING. LOWER CARRIER WING BRACE WITH BLOCK AND TACKLE, CONNECT BRACE TO WING.

TO OPERATE STEP ON FOOT PEDAL (K) TO RELEASE LOCK, THEN MOVE VALVE HANDLE (F) TO OPEN OR CLOSE CARRIER WING. FRONT OF CARRIER WING SHOULD LEAD AT A SLIGHT ANGLE INTO THE BANK.

### ALWAYS REMEMBER

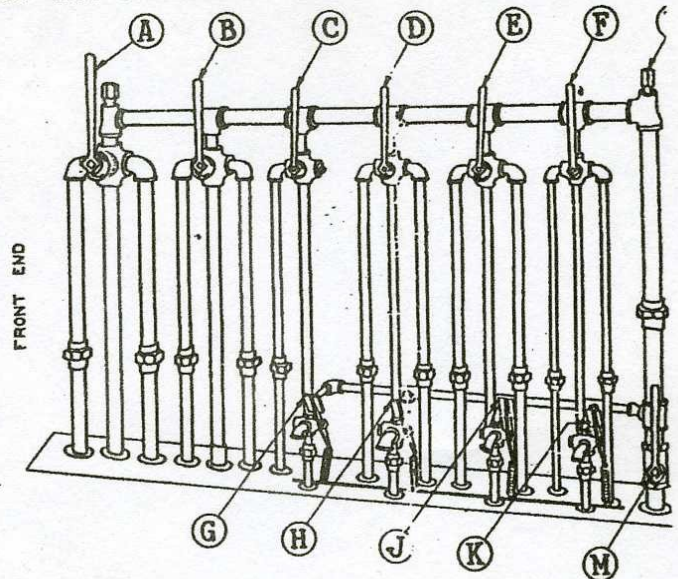
LOCK CYLINDERS ARE IN LOCKED POSITION WHEN FOOT PEDALS ARE RELEASED.

### LUBRICATION

KEEP ALL MOVING PARTS WELL LUBRICATED EXCEPT GEAR RACK TEETH ON TELESCOPIC WING BRACES.

### WINTER OPERATION

BEFORE TURNING AIR INTO RESERVOIR AND MANIFOLD OPEN STOP COCK (M) AND REMOVE PIPE PLUG (N) POUR IN HALF PINT OF ALCOHOL, ALLOWING A LITTLE TIME FOR ALCOHOL TO REACH RESERVOIR. CLOSE STOP COCK (M) AND POUR IN HALF PINT OF ALCOHOL AND HALF PINT OF WINTER OIL AND REPLACE PLUG (N). APPLY AIR INTO RESERVOIR AND MANIFOLD. THEN OPEN VALVES TO SPRAY LIQUID INTO EACH END



BOTTOM OF AIR RESERVOIR TO BLOW OFF ACCUMULATED DIRT. ALSO REFINISHING ALCOHOL AND OIL STOP GEAR RACK TEETH; ON WING BRACES FREE OF SNOW ICE. BRACES ARE EQUIPPED WITH A BLOW PIPE WING OFF LOOSE SNOW. VALVE IN BLOW PIPE SHOULD BE OPENED ONLY A SMALL AMOUNT BECAUSE TOO LARGE OPENING WILL STOP OPERATION OF BRACE LOCK. AIR POURED OVER GEAR RACK TEETH WILL PREVENT THAWING OF ICE. AT THE END OF THE DAY BLEED ALL AIR LINES AND RESERVOIR LEAVING RESERVOIR COCK OPEN.

### IMPORTANT

IF SPREADER DITCHER IS TO BE SHIPPED TO NEW LOCATION, PLACE PLOW CROSSHEAD PINS IN TOP HOLE MAIN POST CROSSHEAD PINS. SHORTEN PLOW SMALL SAFETY CHAIN BY FORMING LOOP OF LOOSE CHAIN TOGETHER BY A BOLT, OR SWING WING FORWARD AND TO PLOW, BE SURE DITCHER WINGS ARE RESTING ON HOOKS. ALL MANIFOLD VALVES TO BE IN NEUTRAL POSITION. ALL CUTOUT COCKS TO BE CLOSED EXCEPT AIR BLEED COCK TO BE OPEN. PLACE TIE ROD THROUGH WINGS AND DRAW IN TIGHT.

### EMERGENCY BRAKE

EMERGENCY BRAKE VALVE IS LOCATED IN THE POSITION AS VALVE (A) IN LEFT HAND MANIFOLD. FOR REPAIR PARTS CATALOG WRITE STATING MODEL SERIAL NUMBER.

NOTE,-

BECAUSE OF THE GREAT NUMBER OF WING ADJUSTMENTS IT IS ALWAYS BEST TO RETURN THE WING TO THE POSITION IN WHICH THE HORIZONTAL WING BRACE IS LOCKED, WHEN IT IS NECESSARY TO UNLOCK THEM

O.F. JORDAN CO