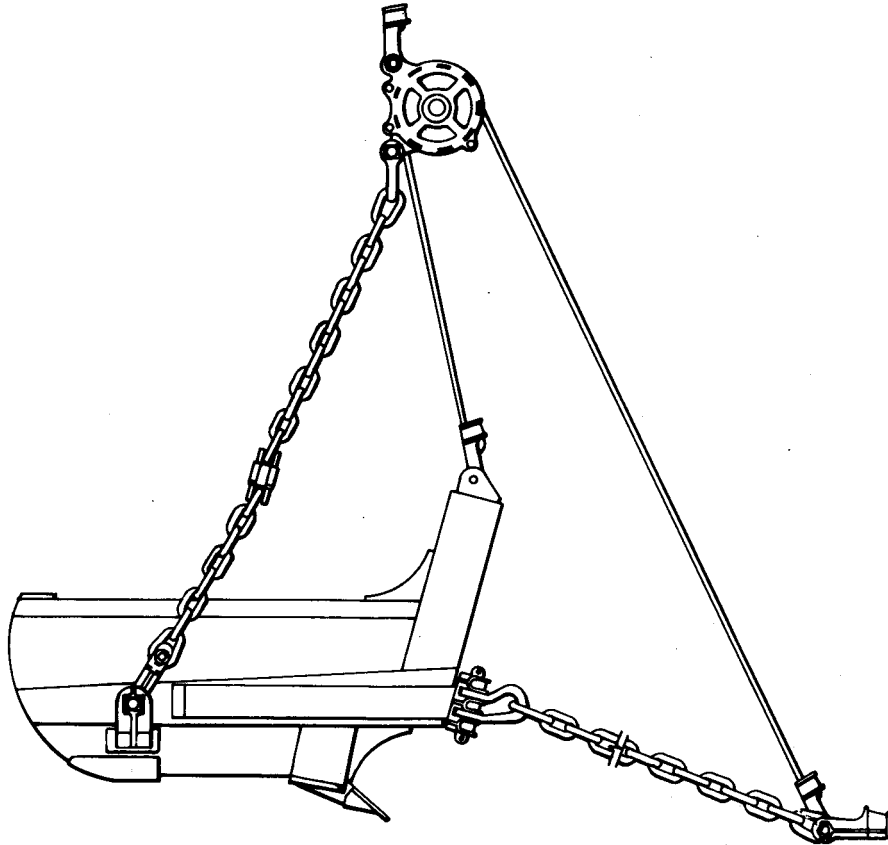


TECHNICAL MANUAL

**OPERATOR, UNIT, DIRECT
SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LIST)**



**BUCKET, DRAGLINE, TYPE II SIZE 75
3/4 CU. YD. MEDIUM PURPOSE
INTERGY MODEL DMD34
NSN 3815-01-249-1692**

HEADQUARTERS, DEPARTMENT OF THE ARMY

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HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 19 November 1989

**OPERATOR, UNIT, INTERMEDIATE
SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LIST)**

FOR

**BUCKET, DRAGLINE, TYPE II SIZE 75
3/4 CU. YD. MEDIUM PURPOSE
INTERGY MODEL DMD34
NSN 3815-01-249-1692**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual, direct to: Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

This technical manual is an authentication of the manufacturers commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

Distribution Restriction: Approved for public release; distribution is unlimited.

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GENERAL DESCRIPTION

DRAGLINE BUCKET
 TYPE II MEDIUM DUTY
 SIZE 75 3/4 CU.YD.
 CLASS S SOLID PLATE

SHIPPING CUBE LENGTH 5'-10 1/2", HEIGHT 4'-5" WIDTH 3'-6 1/2"

TOTAL WEIGHT 1,585 LBS.

HEIGHT 4'-5"

LENGTH 5'-10 1/2"

WIDTH OVERALL 3'-6 1/2"

SHIPPING INSTRUCTIONS

REMOVE ALL DIRT AND MUD FROM DRAGLINE BUCKET. REMOVE DRAG CABLE AND HOIST CABLE FROM DRAGLINE BUCKET. SECURE DRAG LINE SOCKET WEDGE INTO SOCKET BOWL WITH WIRE. SECURE HOIST LINE SOCKET WEDGE INTO SOCKET BOWL WITH WIRE. PLACE DRAG CHAINS AND CROWSFOOT ASSEMBLY INSIDE BUCKET PLACE DUMP BLOCK ASSEMBLY, HOIST CABLE, SPREADER BAR, AND UPPER HOIST CHAIN INSIDE BUCKET. LOWER HOIST CHAIN WILL HANG OVER FROM THE OUTSIDE TO INSIDE. DRAGLINE IS NOW READY FOR SHIPPING.

DRAGLINE STORAGE DRAGLINE STORAGE SHORT TERM 60 DAYS OR LESS. STORAGE CAN BE INSIDE OR OUTSIDE. GREASE DUMP BLOCK SHEAVE WHEN DRAGLINE IS FIRST PUT IN STORAGE. ENSURE ALL NUTS, BOLTS, COTTER PINS, AND SOCKET WEDGES ARE INSTALLED ON THE DRAGLINE.

DRAGLINE STORAGE LONG TERM 60 DAYS OR MORE. STORAGE CAN BE INSIDE OR OUTSIDE. GREASE DUMP BLOCK SHEAVE WHEN DRAGLINE IS FIRST PUT IN STORAGE. ENSURE ALL NUTS, BOLTS, COTTER PINS, AND SOCKET WEDGES ARE INSTALLED ON THE DRAGLINE. EVERY 60 DAYS ROTATE DUMP BLOCK SHEAVE TO ENSURE FREE ROTATION. EVERY 60 DAYS GREASE DUMP BLOCK SHEAVE.

GENERAL DESCRIPTION**READ THIS INTRODUCTION**

EVEN THOUGH YOU MAY BE FAMILIAR WITH DRAGLINE BUCKET OPERATION. SAFETY PROCEDURES, HOOK-UP DIRECTIONS AND MAINTENANCE REQUIREMENTS ARE DISCUSSED. AN ILLUSTRATION OF THIS BUCKET IS ON PAGE 4 OF THIS MANUAL. PERTINENT PARTS ORDER INFORMATION SUCH AS BUCKET TYPE, SIZE, MODEL NUMBER AND SERIAL NUMBER ARE ON THE FRONT OF THIS MANUAL.. THE DRAGLINE BUCKET HAS NO CLOSING MECHANISM. IT IS

A SINGLE UNIT SHAPED IN THE FORM OF A SCOOP WHICH, UNDER DIRECT PULL, SCOOPS A LOAD. CERTAIN FACTORS DETERMINE HOW EFFICIENTLY A DRAGLINE BUCKET WILL DIG AND HOW EASILY IT WILL HANDLE A LOAD.

BALANCE

THE FORCES THAT CAUSE A DRAGLINE TO DIG (DRAG CHAIN PULL AND BUCKET WEIGHT) ACT THROUGH THE CENTER OF GRAVITY OF THE BUCKET. IN COMBINATON, THESE FORCES MUST OVERCOME THE RESISTANCE SUPPLIED AGAINST THE DIGGING EDGE AND LEAD THE BUCKET DOWN AND INTO THE MATERIAL. WELL DESIGNED DRAGLINE BUCKETS ACHIEVE THE PROPER RELATIONSHIP OF DIGGING FORCES SO THE BUCKET IS IN PERFECT BALANCE; DIGGING DEEPLY AT EVERY BITE, NOT RIDING UP OR SKIPPING OVER MATERIAL.

DESIGN

A DRAGLINE BUCKET IS DESIGNED TO USE ITS WEIGHT AND BALANCE. PITCH OF TEETH, SLOPE, SHARPNESS, SHAPE OF THE CUTTING EDGE AND POSITION OF THE HITCH POINTS ALL HELP TO DRAW THE BUCKET DOWNWARD AND FORWARD INTO THE MATERIALS SMOOTHLY WITH NO WASTED EFFORT. DIRECTION OF PULL IN RELATION TO THE CENTER OF GRAVITY CHANGES WITH THE DEPTH OF DIGGING. A DRAGLINE BUCKET HAS SUFFICIENT HITCH POINTS TO PROVIDE COMPLETE ADJUSTABILITY.

OPERATION

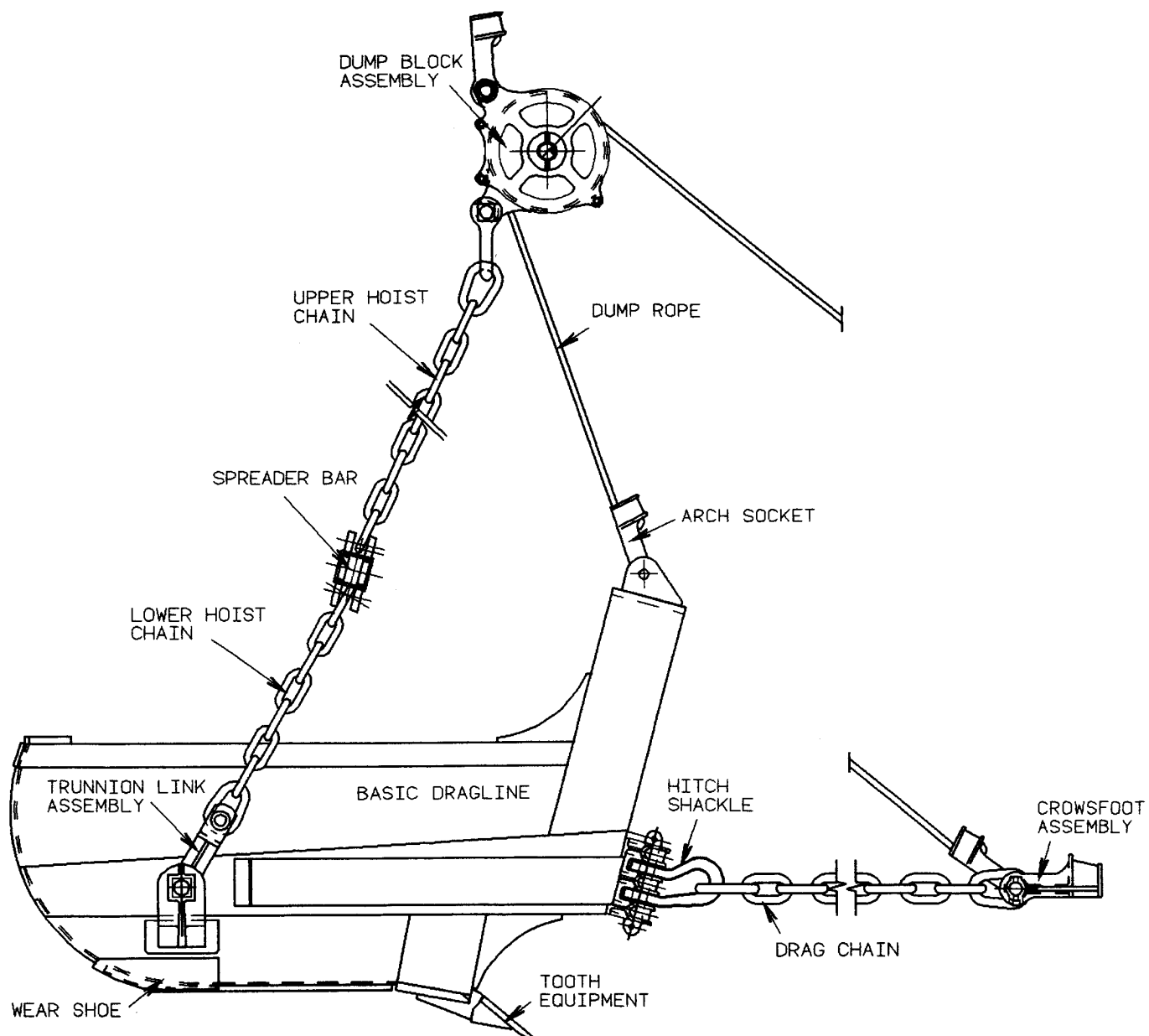
FOR TOP PRODUCTION, A DRAGLINE BUCKET SHOULD BE DE SIGNED TO SUIT MANY DEGREES OF OPERATING SKILL. THE BUCKET SHOULD BE CAPABLE OF DIGGING IN, WHETHER LAND ED ON ARCH, TOOTH POINTS OR FLAT ON ITS BOTTOM.

GENERAL DESCRIPTION

MATCH THE DRAGLINE BUCKET THE CAPACITY OF YOUR CRANE FOR MAXIMUM EFFICIENCY. OPERATING EFFICIENCY IS ALSO DETERMINED BY THE WORKING RADIUS, BOOM LENGTH, TYPE OF CRANE MOUNTING AND ENGINE CAPACITY.

A PROPERLY DESIGNED DRAGLINE BUCKET LOADS TO HEAPED CAPACITY WHEN PULLED ABOUT TWO BUCKET LENGTHS. IT DUMPS FAST, SMOOTH, AND CLEAN TO ASSURE A FAST DIGGING CYCLE. AN OVERSIZED BUCKET WILL OVERLOAD THE CRANE THUS REDUCING SWING SPEED. IT MAY ALSO MAKE THE CRANE DIFFICULT TO HANDLE AND CAUSE UNDUE OPERATOR FATIGUE. UNDERSIZED BUCKETS REDUCE MATERIAL HANDLING CAPACITY.

DRAGLINE NOMENCLATURE

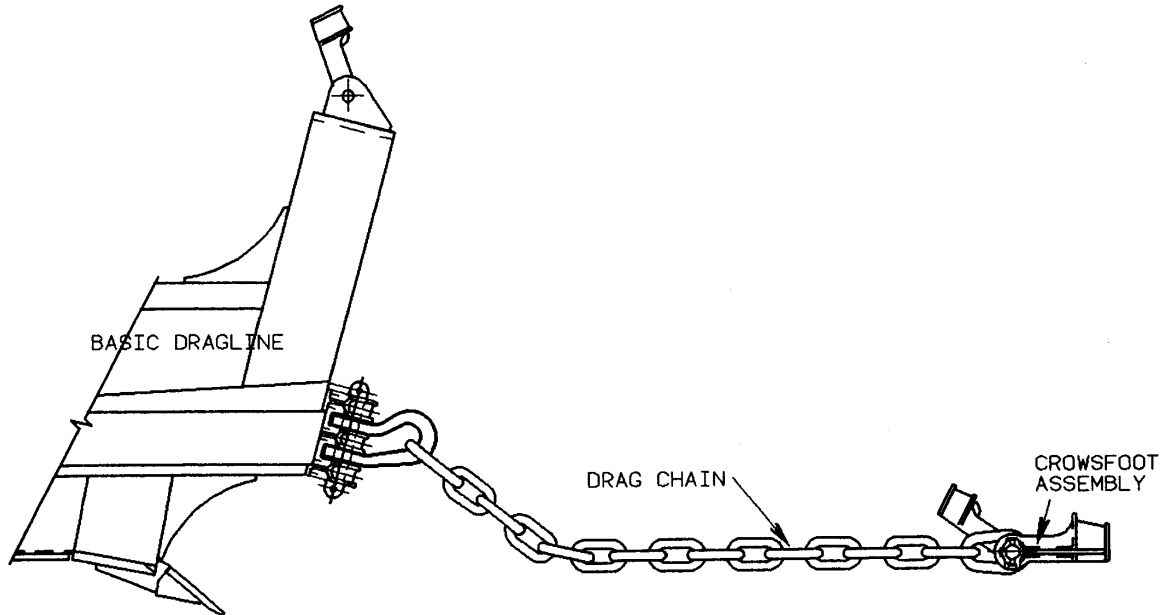


INSTALLATION INSTRUCTIONS

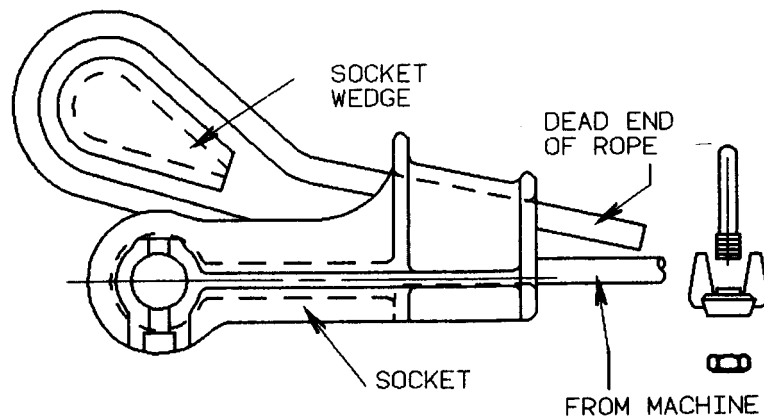
****WARNING****

WEAR OSHA APPROVED HARD HATS, SAFETY GLASSES, SAFETY SHOES AND WORK GLOVES WHEN PERFORMING MAINTENANCE WORK.

1. REMOVE DRAG CHAINS AND CROWSFOOT ASSEMBLY FROM INSIDE OF DRAGLINE.
2. STRETCH DRAG CHAINS AND CROWSFOOT ASSEMBLY OUT FULL LENGTH IN FRONT OF BUCKET TOWARDS MACHINE.

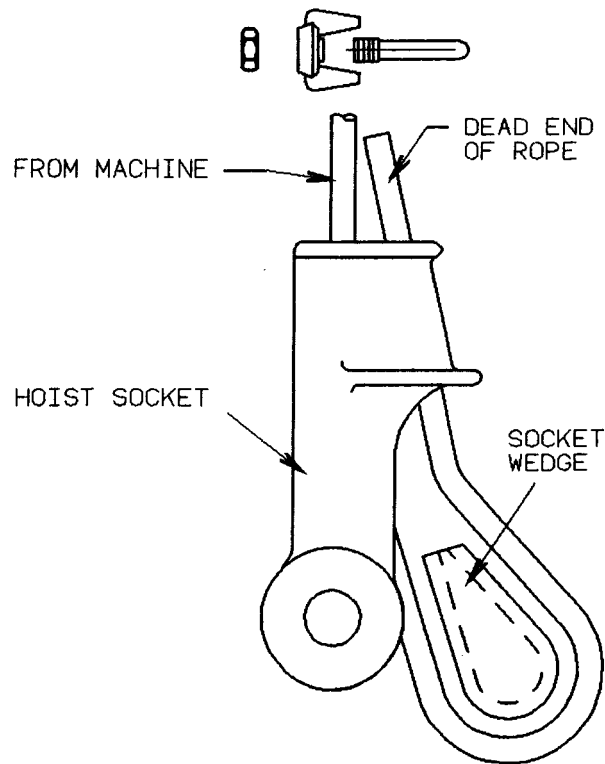


3. LOCATE AND REMOVE CROWSFOOT SOCKET WEDGE.
4. INSERT DRAG ROPE FROM MACHINE INTO SOCKET AND SECURE WITH SOCKET WEDGE. EXTEND DEAD END OF WIRE ROPE 12 INCHES THROUGH SOCKET SECURE WITH CLAMPS SEE TABLE



INSTALLATION INSTRUCTIONS

5. REMOVE DUMP BLOCK ASSEMBLY, HOIST CHAINS AND SPREADER BAR FROM INSIDE BUCKET.
6. LOCATE HOIST ROPE SOCKET AND REMOVE WEDGE.
7. INSERT HOIST ROPE FROM MACHINE INTO HOIST SOCKET AND SECURE WITH SOCKET WEDGE. EXTEND DEAD END OF WIRE ROPE 12 INCHES THROUGH SOCKET SECURE WITH CLAMPS SEE TABLE I PAGE 7.



8. CHECK BUCKET BEFORE HOISTING, ALL PINS, PINLOCKS MUST BE IN PLACE AND TIGHT. ALL SOCKET WEDGES MUST BE IN SOCKETS AND TIGHT.
9. PRIOR TO DIGGING OPERATION MAKE 4 OR 5 PASSES WITH BUCKET. RECHECK ALL WEDGES TO INSURE WIRE ROPE IS PROPERLY SEATED.

******WARNING******

USE CORRECT CABLE. THE SHEAVE, WEDGES, AND SOCKETS OF THIS BUCKET ARE DESIGNED TO USE A PARTICULAR SIZE OF WIRE ROPE CABLE. OTHER SIZE CABLES MAY NOT SEAT PROPERLY AND BECOME LOOSE. AS AN EXTRA PRECAUTION, INSTALL CABLE CLAMPS ON LOOSE ENDS OF THE CABLE AFTER IT EMERGES FROM THE SOCKET (SEE TABLE I) PAGE 7. FAILURE TO DO SO MAY BE HAZARDOUS TO PERSONNEL AND EQUIPMENT.