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MHU-83D/ E Munitions Handling/ Loading Unit

P/N 971480-30 • NSN 1730-01-446-2422

APPLICATION
Standardized equipment for loading/unloading & transporting aerial stores including Munitions, fuel tanks, pylons, special weapons & SAR packs weighing up to 7000 pounds onto/into tactical aircraft

GENERAL
Maximum diameter of store .......................................................... 44 in.
Maximum length of store .............................................................. 230 in.
Maximum weight of store ................................................................ 7,000 lbs.

PERFORMANCE
Lift ...............................................................................................................84 in.
Fork positions
Adapter normal, forks normal
Maximum height .............................................................................. 85.5 in.
Minimum height .................................................................................. 1.5 in.
Adapter inverted, forks normal
Maximum height .............................................................................. 101.5 in.
Minimum height .................................................................................. 17.5 in.
Azimuth (boom either side of center) ................................................ ± 20°

TARE WEIGHT .................................................................................... 7,536 lbs.

LIFT CAPACITY
On table ....................................................................................................... 7,000 lbs.

ENGINE SPECIFICATIONS
Model No................................................................. Deutz F2L1011F
Rated Output ................................................................................. 27 HP @ 2,800 rpm
Operating Cycle .................................................................................. 4 Stroke
Cooling System.................................................................................. Forced air over oil
Bore ........................................................................................................... 3.58 in.
Stroke ....................................................................................................... 4.13 in.
Displacement ................................................................................... 83.6 cu.in.
Fuel ...................................................................................................... Diesel No. 1, 2, JP4, JP8

HYDRAULIC CHARACTERISTICS
GENERAL
General fluid ......................................................................................... MIL-H-83282
Motor drive operating pressure .......................................................... 3,000-5,000 psi
Frame extension system operating pressure .......................................... 1,800 psi
Power brake system operating pressure ............................................... 450 psi
Power steering system operating pressure .......................................... 850 psi
Frame extension system operating pressure .......................................... 1,800 psi
Motor drive operating pressure ........................................................... 3,000-5,000 psi

ELECTRICAL CHARACTERISTICS
12 Volt System
Electric Starter
Alternator
Equipped with floodlights and back-up light
Electrical remote control

HYDRAULICALLY OPERATED ITEMS
Hydrostatic drive system
Maneuver head (remote control option)
Lift Boom (remote control option)
Power steering
Brakes
Auxiliary proportional controlled hydraulic power take off @ maneuver head

COMPONENTS
6 gallon capacity hydraulic fluid reservoir.
Pressure compensated piston type pump for maneuver head, brake, and frame extension delivers 10 gpm at 1,800 psi.
Gear type pump for power steering delivers 1.9 gpm at 1,500 psi.
Emergency hand pump delivers 2 cu.in. per cycle at 1,500 psi.

MOBILITY
Maximum speed loaded ........................................................................ 10.6 mph
Braking distance (loaded) ................................................................. 20 feet
Braking distance (unloaded) ................................................................. 15 feet
Turning radius .................................................................................... 20 feet
Tread width, rear wheels ................................................................... 45.3 in.
Tread width, front wheels (adjustable) .............................................. 47 to 118 1/2 in.
Maximum grade loaded ..................................................................... 10%
Maximum grade unladen .................................................................... 20%

Power steering, hydrostatic transmission, limited slip differential.
Conventional caliper type disc brakes on front wheels and rear drive
Front wheels are equipped 18 X 9.50 - 8NHS, 10 ply tires.
Rear wheels are equipped with 23 X 8.50 - 12 NHS, 12 ply tires

OPERATIONAL STATUS
Qualification tested per USAF specification MIL-T-38846 REV. C
Certified for handling nuclear weapons in accordance with requirements of USAF
EMI tested and qualified for Radiated Emissions (RE102), and Radiated Susceptibility (RS103) per MIL-STD-461D and MIL-STD-462D.
Engine exhaust emission is certified to TIER 2 of European Emission Standards.
Noise emission is limited to less than 85dBA at one meter distance of the unit or operator station per latest issue of ISO 3744.