

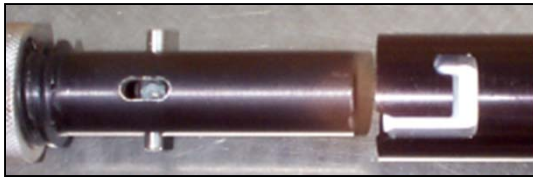
MASTER-LEE ENGINEERED PRODUCTS INC.

The Master-Lee Engineered Products J-Lock AirGrips is designed for quick set up for remote and diverse use

The J-Lock Masts, Grips Adapters, Grips, Controls, and Storage Box make up a complete system for underwater maintenance and remote retrieval.

The Masts are made of high strength aluminum with a black anodized finish. Masts are 1 inch diameter x 10 feet in length. You can connect as many masts together as needed to get to the area you want to access.

The uniqueness of the Master-Lee J-Lock Masts is the quick and positive locking J-Lock connection.



Two welded pins on each mast fit easily into the "J" slot of the mast you are connecting. The J-Lock slot is machined with smooth chamfered lead-in edges for easy and quick alignment to facilitate one-person operation.

A stainless steel nut screws down along the acme threads to hold the pins securely in the J-Lock slot. An additional stainless steel nut follows to lock the two masts together.

The double locking J-Lock connection is a perfect design for use in Foreign Materials Exclusion Zones (FMEZ). No loose parts or specialty tools make this the ideal FMEZ system.

The bottom mast adapter provides the connection to the complete array of Master-Lee AirGrips tools. Vice grips, needle nose pliers, scrappers, clam shells and many more attachments easily attach and lock to the bottom quick-connect.

All gripper attachments are made of stainless steel or chrome plated carbon steel for a long, reliable operating life. The unique quick disconnect incorporates a keyed fitting which prevents the attached tool from rotating.

The air lines are made of durable ¼ inch tubing and can be routed through the center of the handling mast or along the outside for quick setup and disassembly.

The supplied control unit consists of a regulator, gauge and valve for regulating the gripping force. Operating at 90 psi and with minimal air flow, the maximum gripping force of the large gripper is over 100 pounds but can be reduced for "soft touch" operations by regulating the air supply.

J-Lock AirGrips is unique with its easy to use positive locking mechanisms. When you buy a *J-Lock DeluxeGrips* or *J-Lock EconoGrips* system, you receive all the tools, poles and attachments to meet your outage needs.



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MASTER-LEE ENGINEERED PRODUCTS INC.

The Deluxe and Economy J-Lock AirGrips Packages



Large Bail
Part# D0086-5B

Small 6" Lift Bail
Part# D1489



Tool Actuator Air Cylinder (Small & Large)
Part# D1486 & D1483

The assembled package can be operated, including actuation of the air valve, by one person. Unlike other manufacturers, Master-Lee Engineered Products utilizes 1inch diameter aluminum tubing which offers greater stability for less weight. Mast stability is also increased from the tight fitted slip joints, enabling operators to perform delicate maneuvers.

The **DeluxeGrips** package enables 2 operators to work simultaneously. The package consists of:

- 2 — Control Valve & Reg. Assy.
- 2 — .25 in. x 100 ft. Air Hoses
- 4 — Air Cylinders (2 lg, 2 sm)
- 1 — 3 Finger Gripper
- 1 — Small Pliers Head
- 1 — Large Pliers Head
- 1 — Wide Jaw Head
- 1 — C-Clamp Head
- 1 — Needle Nose Head
- 1 — ClamShell Head
- 8 — 10 ft. lengths of 1 in. dia. J-lock x .113 Wall Aluminum Masts
- 1 — 5 ft. Mast with Lifting Bail
- 2 — 6 in. Bottom Mast Adapter



Clamshell
Part# D1775



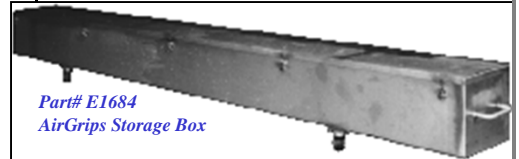
L-Hook Tool



Small Needle Nose Pliers
Part# D2177



Part# D0251
Filter Removal Tool



Part# E1684
AirGrips Storage Box



RodGrips



EPI offers a wide variety of attachments, each one initially designed for a specific application.

The small and large ViseGrips are legendary, known for their versatility. NeedleNose, ClamShell, FuelRod grips and many more are available.

The **EconoGrips** consists of:

- 1 — Control Valve & Reg. Assy.
- 1 — .25 in. x 100 ft. Air Hoses
- 2 — Air Cylinders (1 large, 1 small)
- 1 — 3 Finger Gripper
- 1 — Large Pliers Head
- 1 — Needle Nose Head
- 4 — 10 ft. lengths of 1 in. dia. J-lock x .113 Wall Aluminum Masts
- 1 — Mast Bail
- 1 — 6 in. Bottom. Mast Sections



Large (8") and Small (5") Pliers
Part# D2174 / D2176

When our standard offerings don't meet the application, EPI will custom build Grips based on your specifications.

For additional information contact Master-Lee EPI at:

800/537-6007

724/537-6002

FAX 724/537-9285

Master-Lee EPI

5631 Route 981

Latrobe, PA 15650

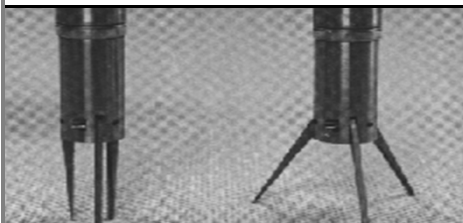
www.masterlee.com



Wide Jaw Grip - Part# D2178

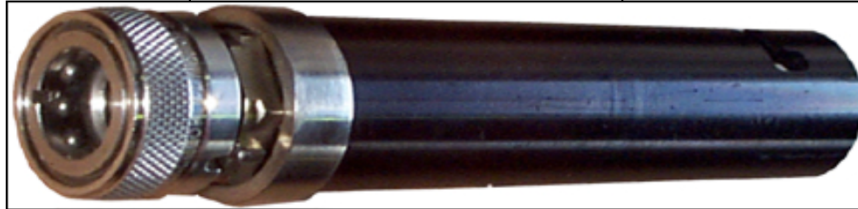


C-Clamp
Part# D2179



MASTER-LEE ENGINEERED PRODUCTS INC.

The Master-Lee Engineered Products Mast Adapter offers compatibility and adaptability to the versatile J-Lock handling poles and the large variety of Master-Lee specialized grippers and tools



J-Lock Mast Adapter - Part #D0082, J-Lock Mast Sections #D0086-x

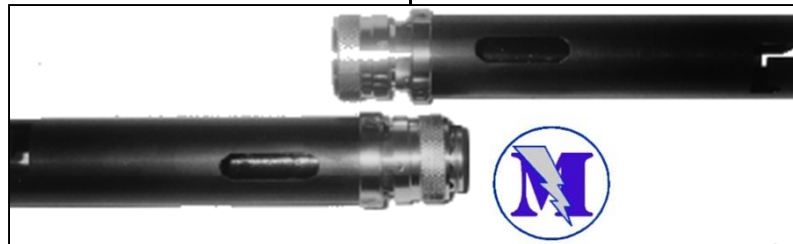
Made of high strength aluminum with a black anodized finish, the 1.5 inch diameter x 7 inch length adapters will provide you with safe and reliable connection to the many Master-Lee grips and end effectors. From underwater vice grips to underwater heavy duty hydraulic cutters, these adapters will accommodate all Master-Lee EPI tools.

The adapter's mating connections have been completely redesigned from top to bottom for quick connection and absolute locking. Each adapter attaches to the extension poles via a modified J-Lock. The J-Lock is machined with smooth chamfered lead-in edges for easy and quick alignment to facilitate one-person operation.

The stainless steel absolute locking quick-connector incorporates an alignment pin for guaranteed protection against accidental disconnecting or release. An additional keyed slot is strategically located within the mating surface for positive alignment and tool orientation.

For added safety, the quick connector is both threaded and welded to the adapter's J-Lock barrel assuring you double protection.

The Master-Lee EPI Mast Adapter weighs less than a pound and can be custom ordered at varying lengths.



When considering productivity, adaptability and value, EPI's new J-Lock Mast Adapter is the choice of the field service specialist.

For additional information contact Master-Lee EPI at:

800/537-6007

724/537-6002

FAX 724/537-9285

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Latrobe, PA 15650

www.masterlee.com



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