



D100 SERIES HYDRAULIC HOSE CRIMPER OPERATORS MANUAL

MODELS COVERED

This manual is applicable to different versions of the D_100_ Series Crimpers. A "Standard", "Metric" and "DC" micrometer is available on different models.

Crimping, calibration and repair procedures are similar for all models. See specific instructions and parts breakdown for the model in question



D100P SERIES CRIMPER



D100H SERIES CRIMPER



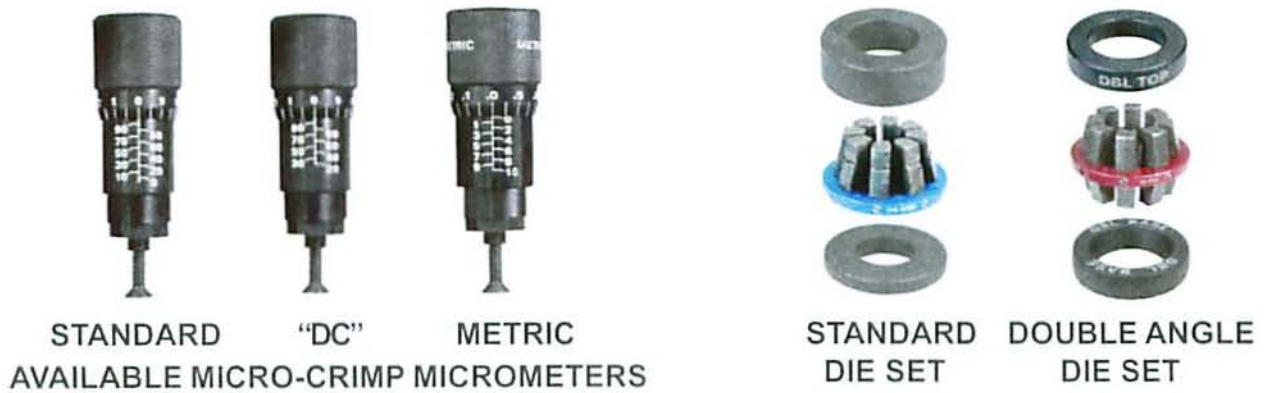
D100S SERIES
CRIMPER



D101S SERIES
CRIMPER



VALPOWER PUMP
(OPTIONAL)



SAFETY PRECAUTIONS



READ INSTRUCTIONS AND IDENTIFY ALL COMPONENT PARTS BEFORE USING CRIMPER.

CRIMPER CAN PRODUCE 35 TONS OF FORCE. KEEP BOTH HANDS AWAY FROM PINCH POINTS.

CONSULT HOSE AND FITTING MANUFACTURER FOR CORRECT MACHINE SETTINGS AND CRIMP MEASUREMENTS.

ALWAYS WEAR EYE PROTECTION.

TO ASSURE ACCURATE CRIMP DIAMETERS FOLLOW THESE STEPS
BEFORE YOU USE THE CRIMPER FOR THE FIRST TIME

CALIBRATION CHECK PROCEDURE

- Position the crimper on a sturdy surface in a well lighted area
- Check crimper calibration prior to initial operation
- Seat the Pressure Plate (flat plate) in the base of the crimper
- Place any D100 series die set on top of the Pressure Plate making certain that the die set is firmly seated against the Pressure Plate. **Do Not use Double Angle Die set for calibration check**

- Place the Compression Ring on top of the die set in the order shown and slide the pusher onto the ram.

- Set the Micro-crimp adjuster as follows:

Standard Micrometer: "100"

"DC" Micrometer: "95"

Metric Micrometer: "0"

- Bring the Pusher into contact with the Compression Ring and continue to apply force until the die set is fully closed and the white line is flush with the surface of the micro crimp adjuster as shown.

- Note that for the D101S series, the electric switch will shut off the power source at the point at which the die set is fully closed and the pump starts to build pressure.

- If the white line is not just visible as shown or the pump does not shut off at the point where the die set is fully closed, the crimper must be re-calibrated. See calibration instructions.



- Place the Pressure Plate, any D100 Series Standard Die Set and the Compression Ring in the crimper in the order shown. *Do Not use Double Angle Components*

- Set the Micro-Crimp Adjuster as follows:

Standard Micrometer:	"100"
"DC" Micrometer:	"95"
Metric Micrometer:	"0"

- Bring the ram and pusher down on top of the compression cone and increase the pump pressure until the die set is completely closed and the pump starts to build pressure.



- All D100 Series Crimpers

Continue increasing the pressure on the compression Cone until the circumferential white line on the Micro-Crimp Sight Button just becomes visible above the Micro-Crimp Adjuster as shown in the illustration.



- D101S Series Crimpers

The Electric pump should completely close the die set before the pump shuts off.

- If the white line is not visible or the electric pump does not shut off when the dies are completely closed, adjust the calibration adjustment screw under the Micro-Crimp Adjuster contact button as illustrated. Repeat the calibration procedure until the above conditions are satisfied.

- When the above conditions are met, the crimper is calibrated and ready for use.



- Place the flat pressure plate in the bottom flange and select the correct die set for the combination of hose and fitting to be crimped. Refer to the hose and fitting manufacturer's recommendation for the correct die set to use.
- Lubricate the contact surfaces of the die fingers and compression cone thoroughly with the die lubricant furnished with the crimper (EZCRIMP M). *Failure to lubricate the contact surfaces with the proper lubricant will cause the dies to seize in the compression cone.*
- Set the Micro-Crimp Adjuster to the setting recommended by the hose and fitting manufacturer for the combination of hose and fitting being crimped.

NOTE: The Metric Micro-Crimp Adjuster is a direct reading micrometer. Add the setting on the micrometer to the closed diameter of the die set to obtain the finished crimp diameter. For example: With a 39mm die and the Micro-Crimp Adjuster set at 3 the finished crimp diameter would be 42mm

- Place the Compression Ring over the die set and align the fitting to the correct position.
- Slowly bring the Pusher in contact with the Compression Ring until the hose and fitting are held in position with a very light pressure. Recheck the fitting for correct alignment.
- Continue to apply pressure until the white circumferential line on the Micro-Crimp Sight Button just appears above the Micro-Crimp Adjuster or the electric power unit shuts off for the 101S crimper.
- Check the diameter of the finished crimp to be certain that it is within the specifications of the hose and fitting manufacturer.

NOTE: Each die set has a limited range of diameters for which it can be used. A "Rule of Thumb" is that if you can see the notches on the die fingers under the Compression Ring prior to crimping, you must select a larger die size.



- The Double Angle Dies are special purpose dies designed to double the crimping force thus allowing larger fittings to be crimped with less vertical force. The limitation, however, is that they must crimp to a near fully closed position and therefore a given die set can crimp only limited range above the diameter shown on the die ring.



- To use the Double Angle Die set, remove the flat pressure plate from the cone base and replace it with the compression plate labeled 'DBL BASE' whose angle matches that on the Double Angle Die.

- Seat the Double Angle Die in the conical recess of the 'DBL BASE' cone and position the hose and fitting as specified by the fitting manufacturer.

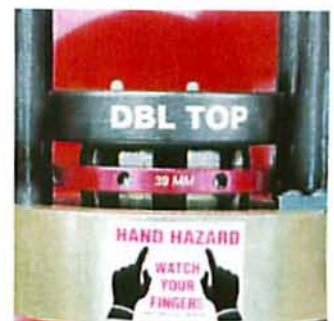
- Place the 'DBL TOP' Compression Ring on top of the die set making sure that the fitting is still correctly positioned. Slide the pusher into place on the cylinder ram. *Note: the angles on the Double Angle compression ring and the Standard Compression ring are not the same. The DBL Top compression ring must be used with the Double Angle Die set.*



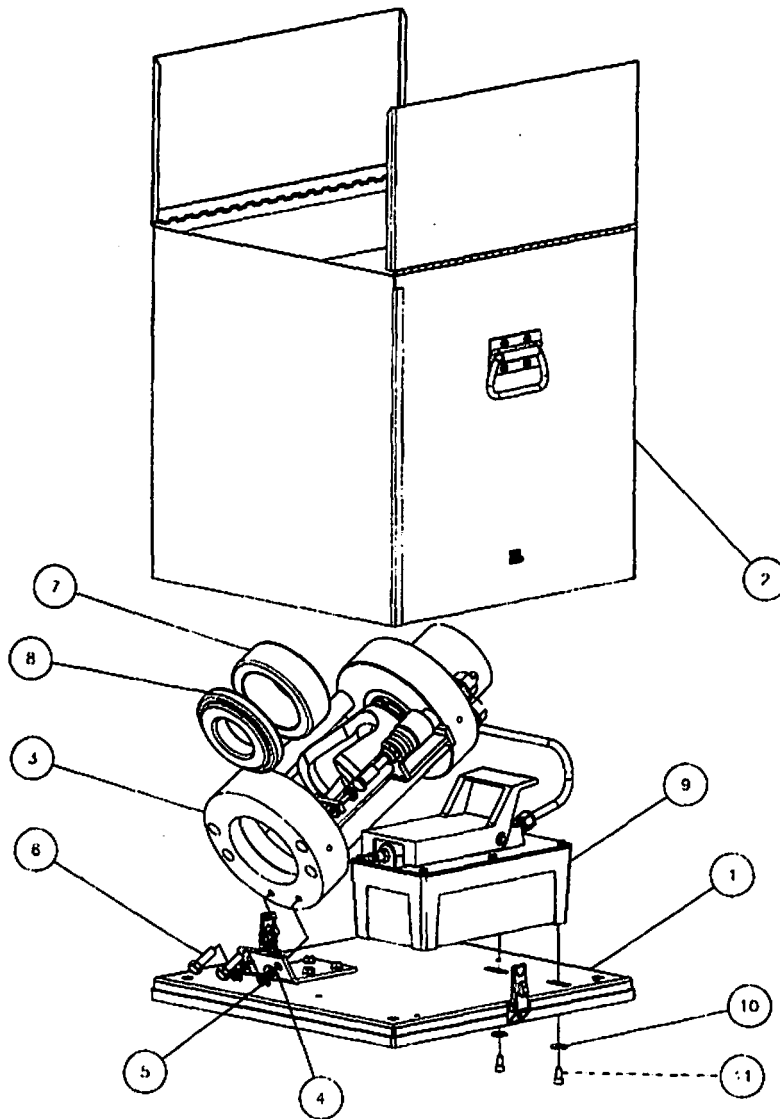
- Set the Micro-Crimp Adjuster at the recommended setting specified by the hose and fitting manufacturer.

Note: The direct reading feature of the Micro-Crimp Adjuster is not applicable with Double Angle Dies. Follow the hose and fitting manufacturer's recommendations

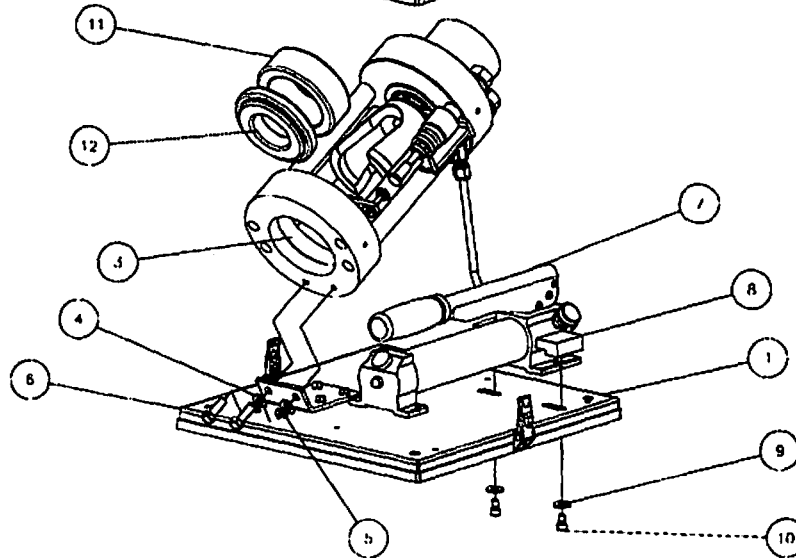
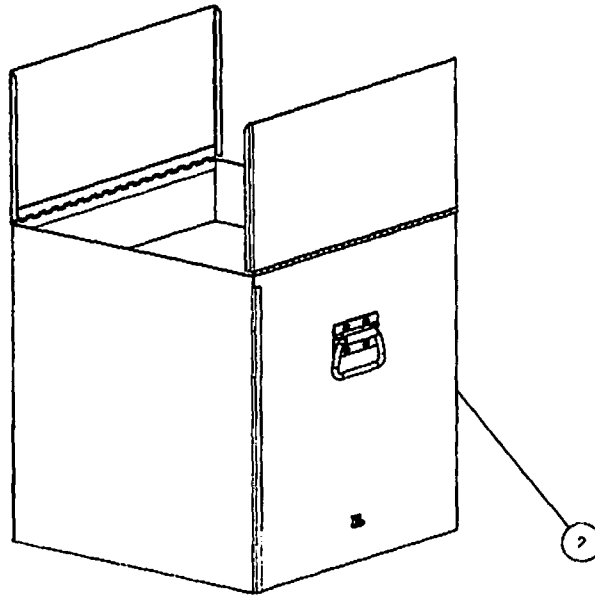
- Cycle the crimper until the white circumferential line on the Micro-Crimp Sight Button just appears on the top of the Micro-Crimp Adjuster or the power unit shuts off for the D101S unit. Note that if the die is not brought to a near fully closed condition, there is the possibility that the crimps will be tapered along the length of the crimp diameter.



- Check the crimp diameter to be certain that it is within the specifications of the hose and fitting manufacturer.

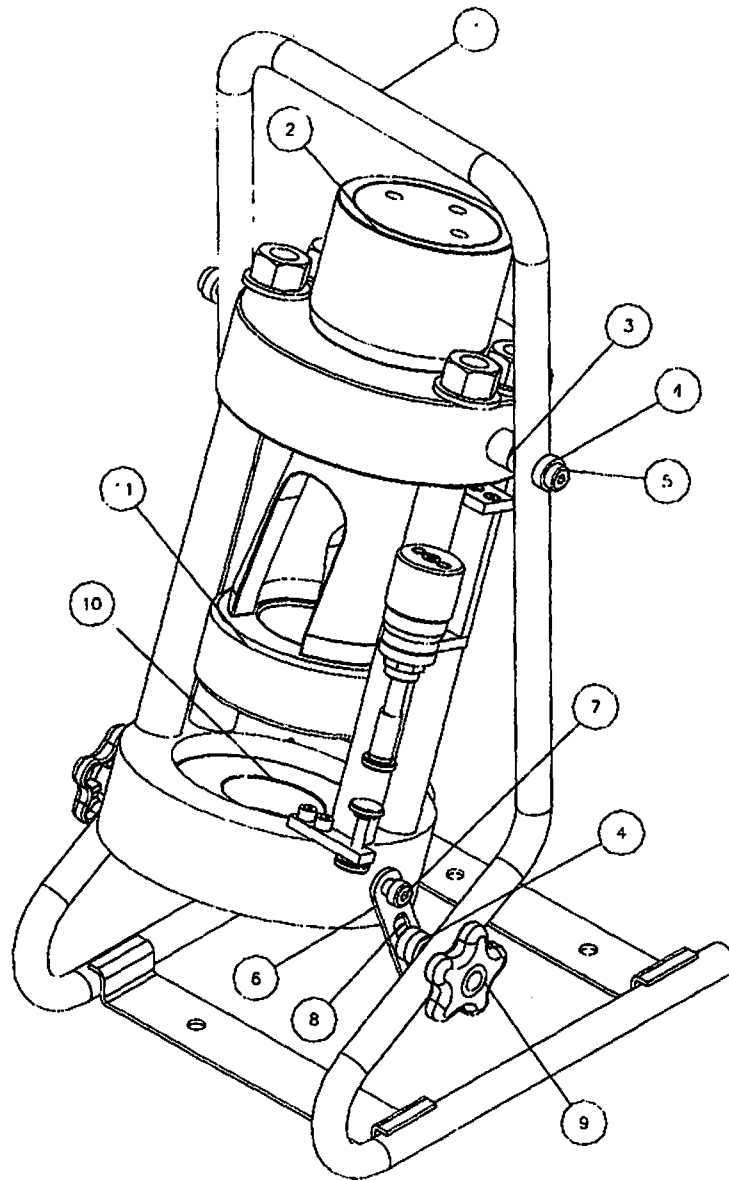


D100P Assembly (100937)				
Item	Part No.	Description	Vendor	Qty
1	100930	D100 BASE ASSEMBLY		1
2	100931	D100 COVER ASSEMBLY		1
3	100929	D100 FLAT ASSEMBLY		1
4	90126A031	3/8 FLAT WASHER	McMaster	2
5	91102A031	3/8 LOCK WASHER	McMaster	2
6	92865A626	3/8 16 X 1 1/4 HEX BOLT	McMaster	2
7	100849	COMPRESSION CONE		1
8	100869	PRESSURE PLATE		1
9	100936	PNEUMATIC PUMP ASSY		1
10	90108A029	1/4 FLAT WASHER WIDE	Mc Master	2
11	9125A537	1/4-20 UNC X 1/2 SHCS	Mc Master	2

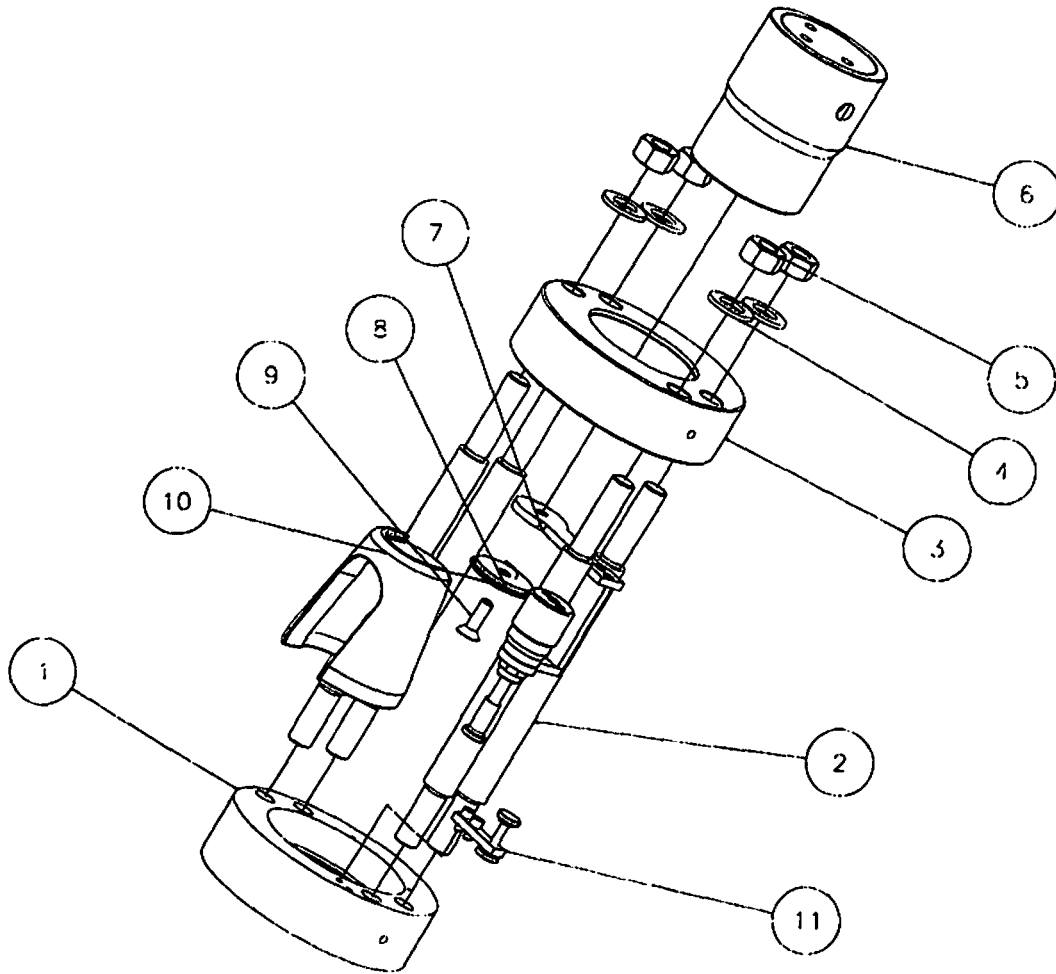


D100H Assembly (100935)

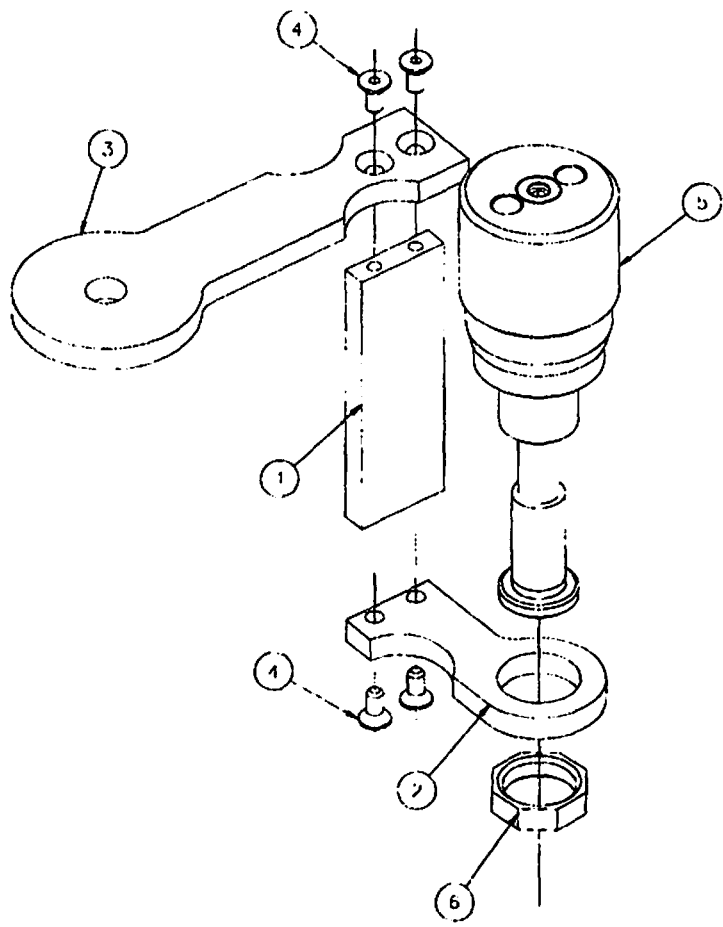
Item	Part Number	Description	Vendor	Qty
1	100930	D100 BASE ASSMBLY		1
2	100931	D100 COVER ASSEMBLY		1
3	100929	D100 HEAD ASSMBLY		1
4	90126A031	3/8 FLAT WASHER	McMaster Carr	2
5	91107A031	3/8 LOCK WASHER	McMaster Carr	2
6	92865A626	3/8 16 X 1 1/4 HEX BOLT	McMaster Carr	2
7	100934	HAND PUMP ASSY		1
8	100338	HAND PUMP COMP		2
9	91090A111	5/16 FLAT WASHER WIDE	McMaster-Carr	2
10	91251A5/8	5/16-18 X 1/2 NUTS	McMaster Carr	2
11	100849	COMPRESSION CONE		1
12	100869	PRESSURE PLATE		1



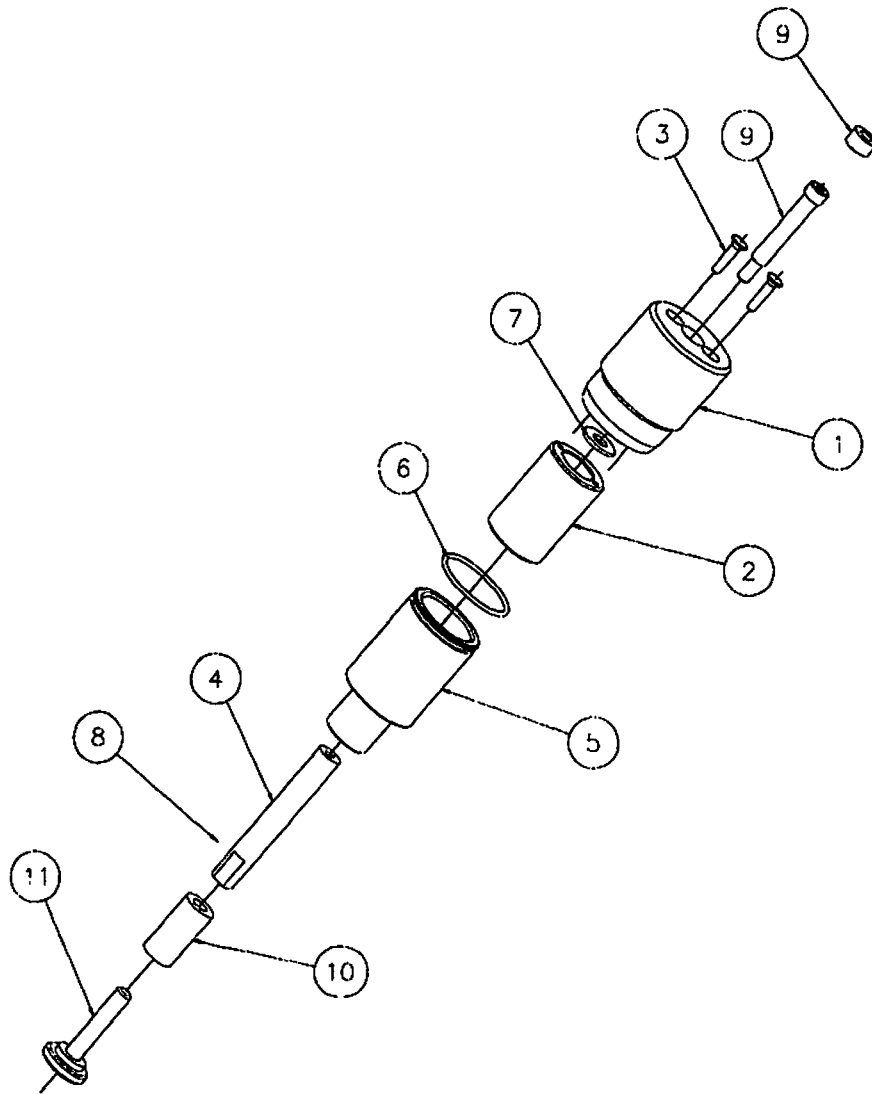
D100 Assembly (Portable) 101013					
Item	Part Number	Description	Qty	Vendor	Note
1	100905	D100 Crimper Frame	1		
2	100929	D100 Head Assy	1		
3	101040	3/8 X 3/4 X 5/8 Spacer	2		Cut To Width
4	100956	3/8 X 3/4 X 1/4 Spacer	6		Cut To Width
5	91259A628	3/8 X 1 1/2 Shoulder Screw	2	McMaster	
6	100980	Adjustment Arm	2		
7	91259A617	3/8 X 3/8 Shoulder Screw	2	McMaster	
8	93548A628	3/8 16 X 1/2 Carriage Bolt	2	McMaster	
9	DK 186	Angle Adjustment Knob	2	Reid	
10	100869	Pressure Plate	1		
11	100849	Compression Cone	1		



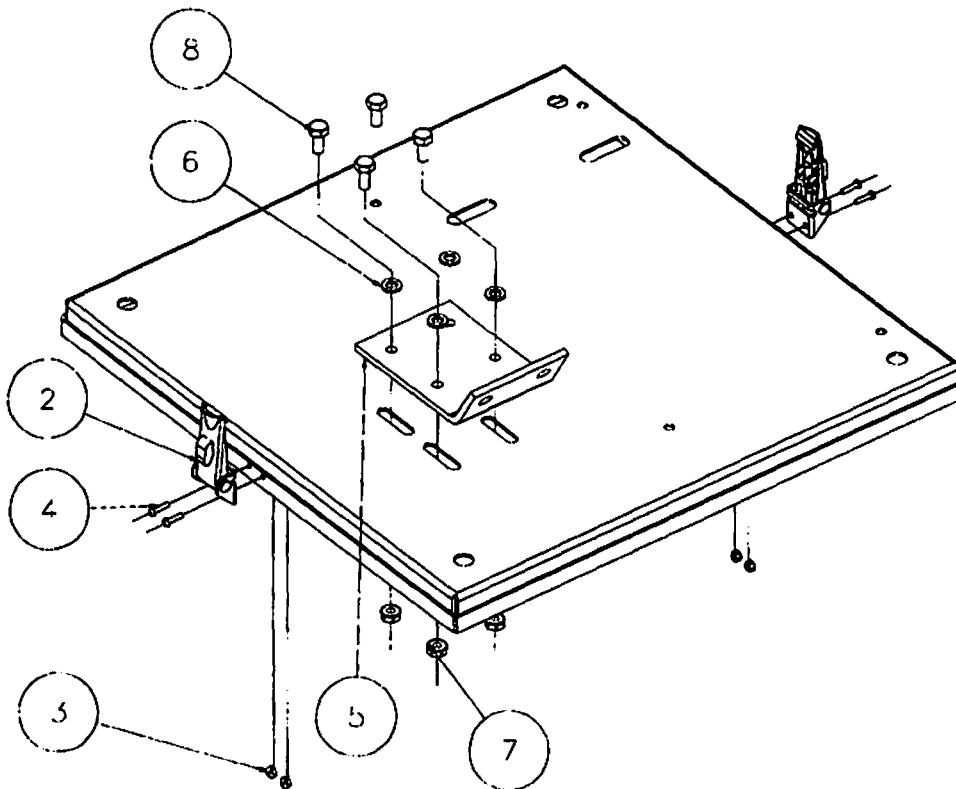
D100 Head Assembly (100929)				
ITEM	PART #	DESCRIPTION	VENDOR	QTY
1	100325	30-TON BOTTOM FLANGE	CMS, INC	1
2	100329	D100 STRAIN ROD	CMS, INC	1
3	100326	30 TON TOP FLANGE	CMS, INC	1
4	90126A0.56	3/4 FLAT WASHER	McMaster	4
5	95462A5.58	3/4-10 HEX NUT	McMaster	4
6	100685	30-TON CYL ASSY		1
7	100898	MICROMETER MOUNT ASSY		1
8	100812	PUSHER SUSPENSION PIN	CMS, INC	1
9	3/8-16 X 1 HSFHS	PUSHER PIN SCREW		1
10	100813	30-TON PUSHER	CMS, INC	1
11	100898-04	MICRO PAD ASSY		1



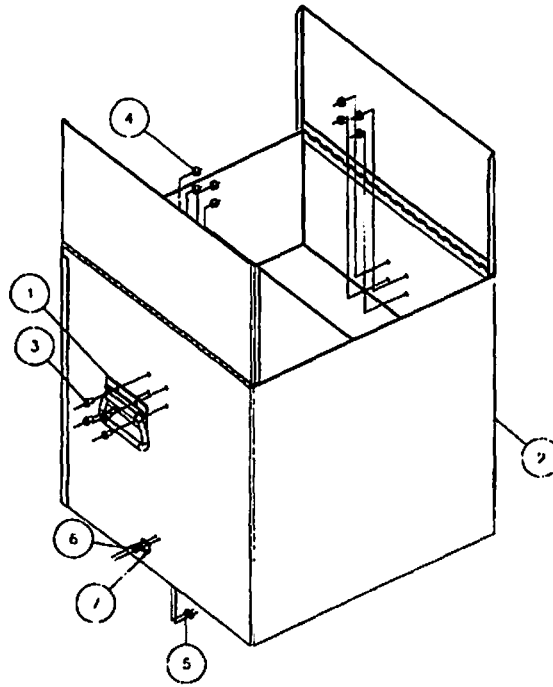
Metric Micro Mount Assy (101594)				
Item	Part Number	Description	Vendor	Qty
1	100898-01	Micrometer Arm		1
2	100898-02	Micrometer Base		1
3	100898-03	Micro Suspension Flange		1
4	9253A189	//8-32 X 1/4 HSR-S	McMaster	4
5	101587	Metric Micrometer Assy		1
6	100727	Micro Nut		1



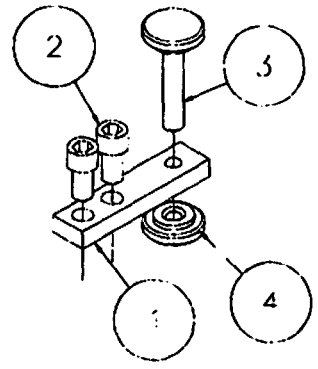
Metric Micrometer Assy (101587)					
Item	Part Number	Description	Qty	Vendor	Note
1	101587-01	Adjustment Thimble	1		
2	101587-03	Adjustment Screw	1		
3	91253A148	6-32 x 1/2 Flat Head Screw	2	McMaster	
4	100628-04	Adjustment Rod	1		
5	101587-02	Adjustment Barrel	1		
6	021 O-Ring	"O" Ring	1		
7	USS 10 Washer	Washer	1	McMaster	
8	LC 042E 1/4	Adjuster Spring	1	Lee Spring	(Not Shown)
9	100912	Sight Cop & Bolt	1		
10	100628-05	Adjustment Rod Cover	1	McMaster	Fabricated from 9282K12
11	9185A667	Adjusting Screw	1	McMaster	



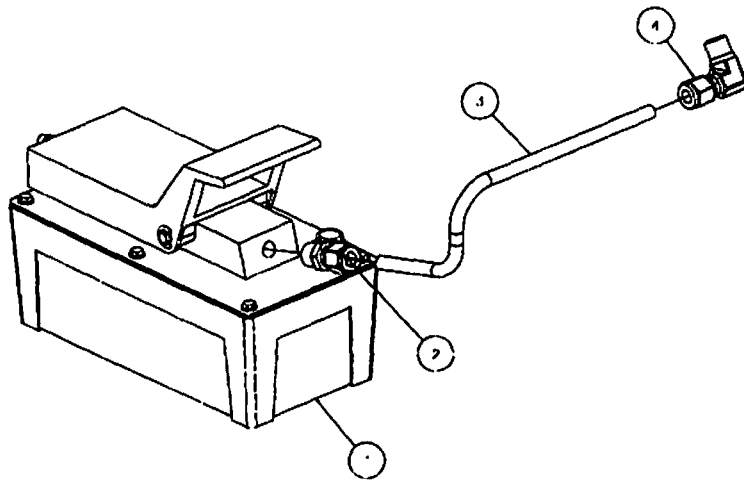
D100 Sheet Metal Base Assy (100930)				
Item	Part No.	Description	Vendor	Qty
1	100330	D100 BASE		1
2	864A15	LATCH	McMaster-Carr	2
3	906/5A005	4-40 KEPS NUT	McMaster-Carr	4
4	902/2A110	4-40 X 1/2 PHILLIPS HEAD MACH SCREW	McMaster-Carr	4
5	100335	D100 MOUNTING BRACKET		1
6	90126A029	1/4 PLAIN WASHER	McMaster Carr	4
7	906/5A029	1/4-20 KEPS NUT	McMaster-Carr	4
8	92865A938	1/4 20 X 5/8 HEX BOLT	McMaster-Carr	4



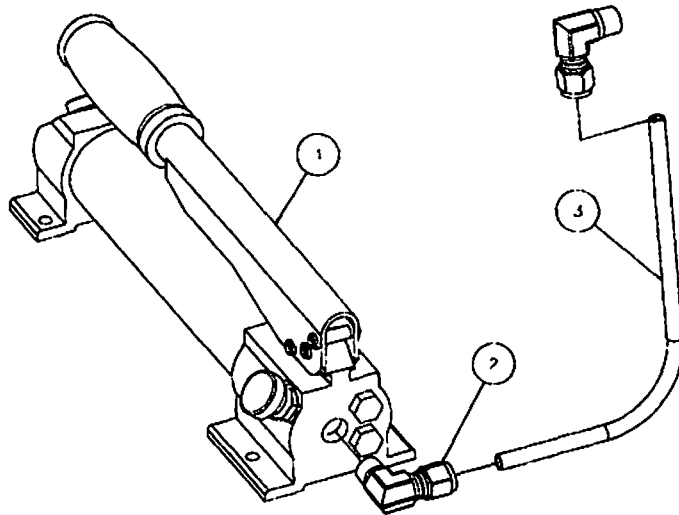
D100 Sheet Metal Cover Assy (100931)				
Item	Part No.	Description	Vendor	Qty
1	1647A42	HANDLE	McMaster-Carr	2
2	100337	COVER		1
3	90283A240	10-24 X 5/8 MACHINE SCREW	McMaster-Carr	8
4	90631A011	10-24 LOCK NUT	McMaster-Carr	8
5	90675A005	4-40 KEPS NUT	McMaster-Carr	4
6	90272A110	4-40 X 1/2 PHILLIPS HEAD MACHINE SCREW	McMaster-Carr	4
7	1864A15	CATCH	McMaster-Carr	2



Micro Pcd Assy (100898-04)				
Item	Part No.	Description	Vendor	Qty
1	100678-C1	AM-100678-01 MOUNTING PLATE		1
2	91251A537	1/4-20 X 1 1/2 SOCKET HEAD CAP SCREW	McMaster	2
3	91185A667	1/4-20 X 1 1/4 THUMB SCREW	McMaster	1
4	92815A115	1/4-20 KNURLED LOCK NUT	McMaster	1



D100 Pneumatic Pump Assy (100936)				
Item	Part No.	Description	Vendor	Qty
1	100620	PNEUMATIC PUMP		1
3	100620 01	PNEUMATIC PUMP TUBI		1
4	3/8 NPT ELBOW FTC	ELBOW COMPRESSION FITTING		1
2	3/8 NPT STRAIGHT FTC	STRAIGHT COMP FITTING		1



D100 Hand Pump Assy (100934)				
Item	Part No.	Description	Vendor	Qty
1	P19 HAND PUMP	HAND PUMP	Power Team	1
2	3/8 NPT FITTING	ELBOW FITTING		2
3	D10011 PUMP TUBL	HAND PUMP TUBL		1