

TBHD1M (AS5259/1) 12 TON HYDRAULIC INSTALLING HEAD



DATASHEET

SEE PAGE 7 FOR IMPORTANT INFORMATION CONCERNING LIMITED WARRANTY, AND LIMITATION OF LIABILITY

Following are the operating instructions for the TBHD1M (AS5259/1-0001) installing head, using the HPU1*M hydraulic power unit, & 12-4040 (AS5259/1-0003) hydraulic connecting hose. The crimp tool system is intended to be used with MS90485 type dies for copper un-insulated terminals & contacts, as well as, MS23002 type die sets for copper insulated terminals.

MS. PART NO.
MS25441-1

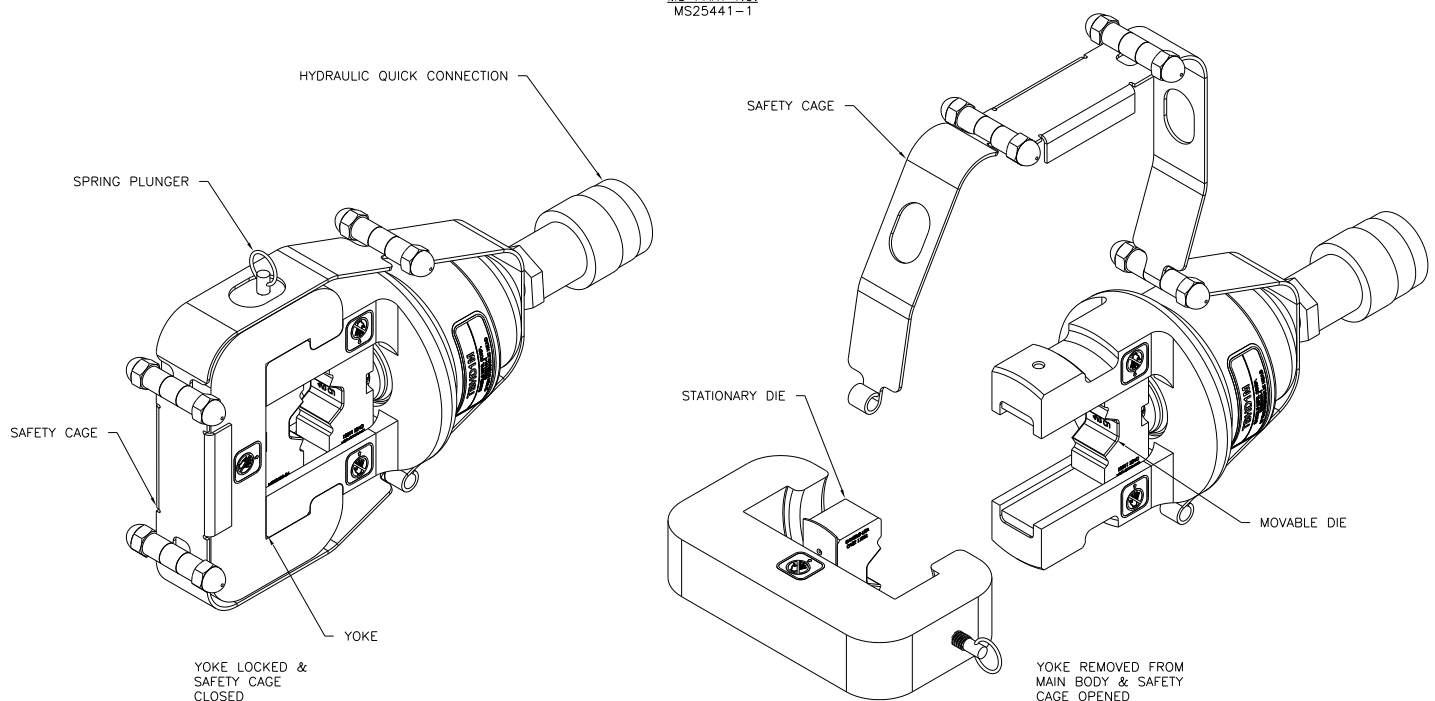


Figure 1
12 TON HYDRAULIC INSTALLING HEAD
AS5259/1-0001 (TBHD1M)

TBHD1M (AS5259/1)

12 TON HYDRAULIC INSTALLING HEAD

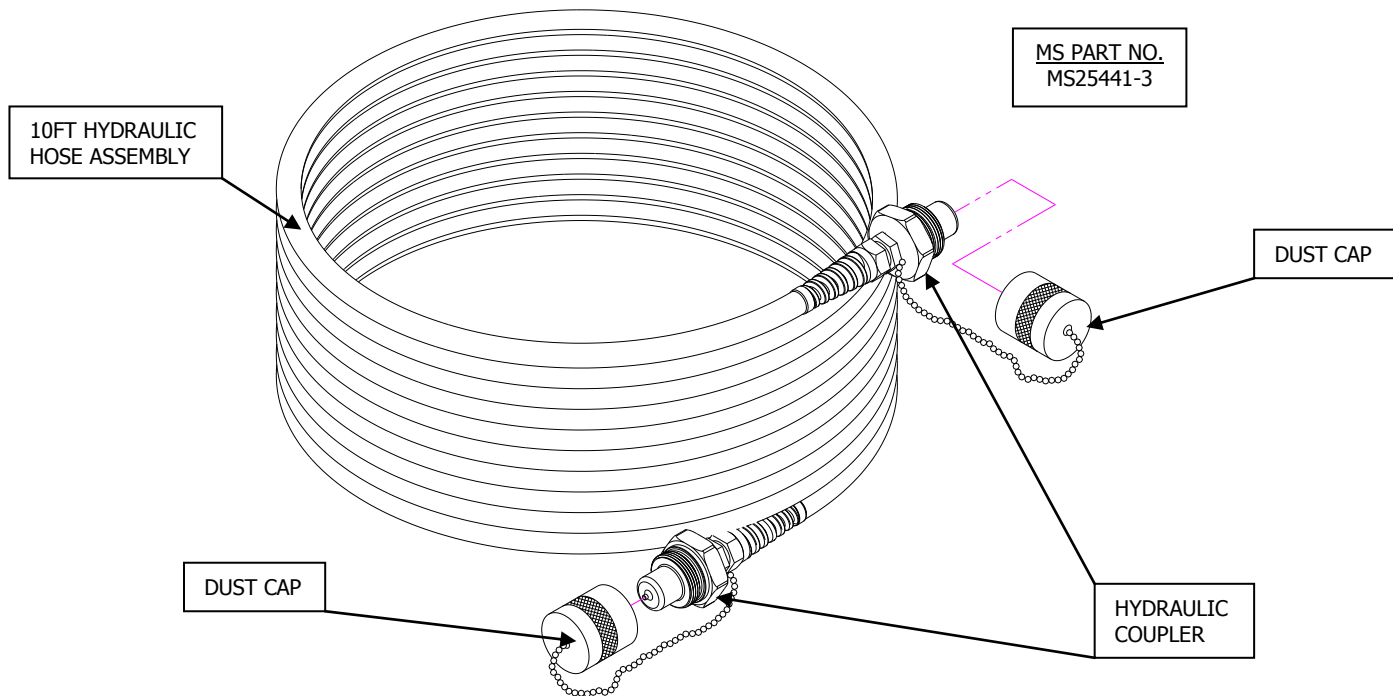


FIGURE 2
CONTROL HOSE ASSEMBLY
AS5259/1-0003 (12-4040)

Connecting to the Pump:

1. Remove the dust cap from the hydraulic crimp head's quick connection.
2. Remove one of the dust caps from the 12-4040 hydraulic connecting hose.
3. Screw the fitting on the end of the hose into the mating connector on the crimp head. Screw in until fully seated.
4. Remove the second dust cap from the 12-4040 hydraulic connecting hose.
5. Screw the fitting on the end of the hose into the mating connector on the pump. Screw in until fully seated.

See operating instructions HPU1*M-DS for pump operating instructions.

Installing a Die Set:

1. Pull the quick release pin out of the safety cage.
2. Unfold the safety cage via the built in hinge points (See Figure 1).
3. Pull the spring plunger out and rotate the yoke, as shown in Figure 1, to remove it from the main body.
4. Place the movable die half between the die rails of the main body. Carefully lower the die and mate the die snap retainer to the snap retainer located in the tool push rod.
5. Place the stationary die half into the yoke, as shown in Figure 1, and snap the die into the mating snap of the yoke.
6. With the yoke & die orientated as shown in Figure 1, place the stationary die between the die rails of the main body. The flat spring mounted on the stationary die will sit in the recessed pockets of the main body.
7. Pull the spring plunger up, so that it is out of the way, and rotate the yoke back into the locked position as shown in Figure 1.

TBHD1M (AS5259/1)

12 TON HYDRAULIC INSTALLING HEAD

NOTE: The spring plunger will drop into the mating hole of the main body to prevent rotation when it is not wanted.

CAUTION!: DO NOT OPERATE THIS TOOL WITHOUT A DIE SET INSTALLED AND THE YOKE PROPERLY ATTACHED, AND LOCKED IN PLACE.

Conductor Preparation:

Using a proper insulation stripping tool, strip the insulation from the conductor, being careful not to nick the wire strands. Thoroughly clean the conductor by wire brushing until a bright and shiny surface is obtained. All oxides and foreign matter must be removed.

NOTE: Do Not wire brush tin plated copper conductors.

Crimping a Terminal Lug:

1. Place a lug with a conductor fully inserted into the wire barrel, in the nest of the stationary die.
2. Operate the HPU1*M power unit start the flow of hydraulic fluid into the system.
3. Continue operating the power unit until the gage on the power unit reads 10,000 psi. DO NOT release the pressure in the system until 10,000 psi is reached, EXCEPT in cases of emergency. Crimping with less than 10,000 psi will result in insufficient compression, and produce bad crimps.
4. The manual and air driven power units will hold pressure until they are released.
5. If using the manual or air driven power unit, operate the power unit to release pressure, and retract the cylinder.
6. The battery and electric driven power units automatically retract when 10,000 psi is achieved.

For additional crimping instructions refer to the guidelines supplied by the terminal manufacturer, crimp die set manufacturer, or the system manager.

Mounting the TBHD1M to the Optional Bench Mount (BM-2A)

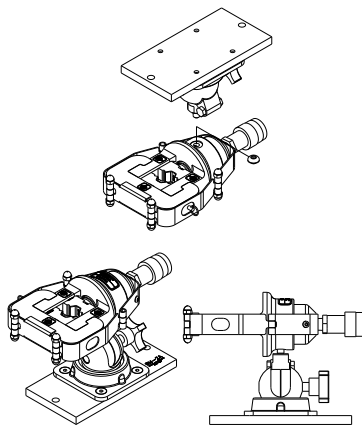


Figure 3

TBHD1M (AS5259/1)

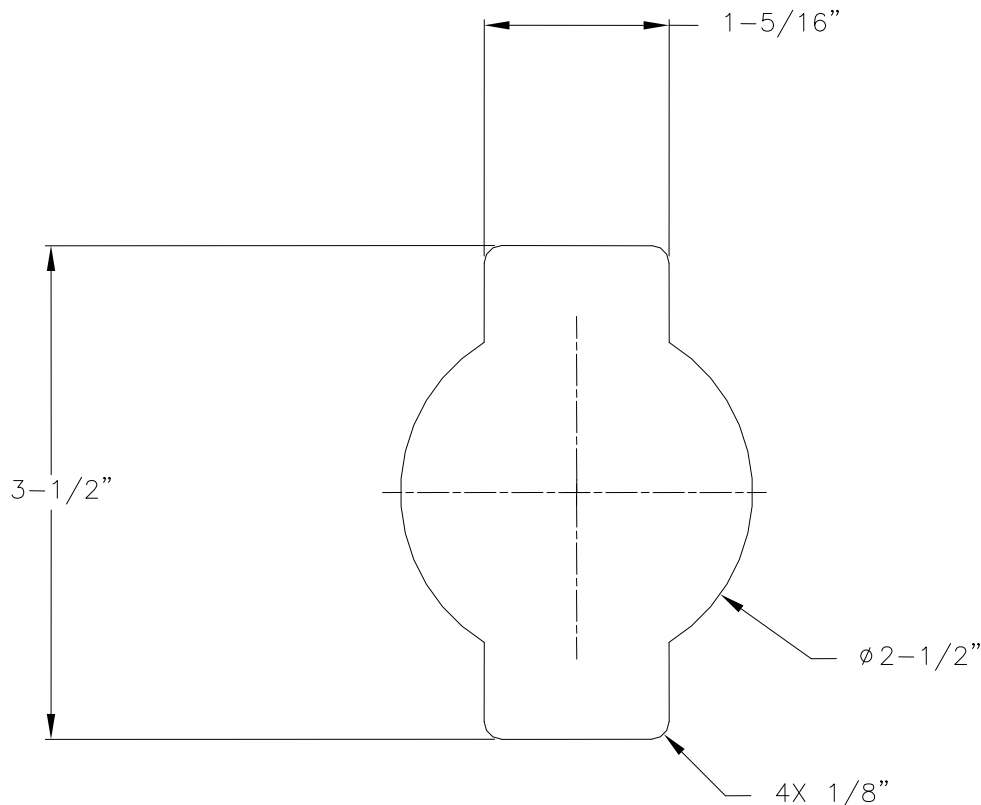
12 TON HYDRAULIC INSTALLING HEAD

Note: The BM-2A bench mount must be ordered separately.

1. Hold the TBHD1M head, either by hand or in a vise, with the cap screw oriented upwards as shown in the top view of Figure 3.
2. Remove the cap screw with a hex key wrench. Maintain the orientation as shown while the screw is out of the crimp head. Failure to do so will allow ball bearings to come out of the tool, and render it inoperable.
3. Screw the stud of the BM-2A into the threaded hole of crimp head while maintaining the upward orientation.
4. Tighten with a wrench. The stud of the BM-2A will bottom against one of the ball bearings in the tool. DO NOT over tighten.
5. The assembled unit can now be turned back over, as shown in the lower views of Figure 2, and mounted to a work surface.

Note: It is recommended that the assembled TBHD1M & BM-2A be bolted to a work surface due to the weight of the crimp head.

If it is desired to mount the TBHD1M crimp head vertically through an opening in a table or cart, the following cut out can be used.

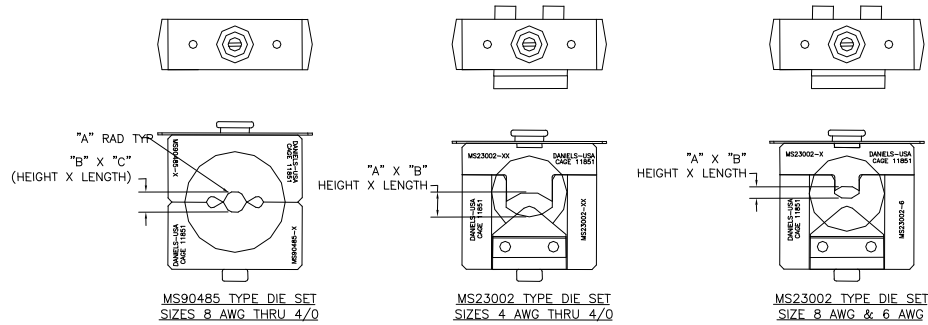


TBHD1M (AS5259/1)

12 TON HYDRAULIC INSTALLING HEAD

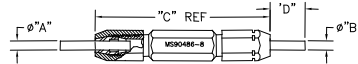
DATASHEET

Die sets and gages for use with the TBHD1M crimp head



	A	B	C	D	E	F	G	H
1	DIMENSIONS FOR MS90485 DIE SETS (COPPER UN-INSULATED TERMINALS AND CONTACTS)							
2	MS90485--	WIRE SIZE	A±.005	B±.002	C±.003	ENGRAVING	MS GAGE P/N	DMC P/N
3	8	8	.031	.210	.310	8 CU	MS90486-8	G720
4	6	6		.240	.372	6 CU	MS90486-6	G721
5	4	4		.299	.435	4 CU	MS90486-4	G722
6	2	2		.377		2 CU	MS90486-2	G833
7	1	1	.062	.417		1 CU	MS90486-1	G834
8	01	0		.456		1/0 CU	MS90486-01	G835
9	02	00		.500	.502	2/0 CU	MS90486-02	G836
10	03	000		.562	.627	3/0 CU	MS90486-03	G837
11	04	0000	.094	.618	.740	4/0 CU	MS90486-04	G838

	A	B	C	D	E	F	G	H
1	DIMENSIONS FOR MS23002 DIE SETS (AS7928 COPPER INSULATED TERMINALS)							
2	MS23002--	WIRE SIZE	COLOR CODE	A±.002	B±.005	ENGRAVING	MS GAGE P/N	DMC P/N
3	8	8	RED	.170	.250	8	MS23003-8	G723
4	6	6	BLUE	.202	.312	6	MS23003-6	G724
5	4	4	YELLOW	.254	.375	4	MS23003-4	G725
6	2	2	RED	.312	.500	2	MS23003-2	G287
7	1	1	WHITE	.339		1	MS23003-1	G726
8	01	0	BLUE	.370	.437	1/0	MS23003-01	G727
9	02	00	YELLOW	.404	.562	2/0	MS23003-02	G728
10	03	000	RED	.438		3/0	MS23003-03	G282
11	04	0000	BLUE	.473	.625	4/0	MS23003-04	G729



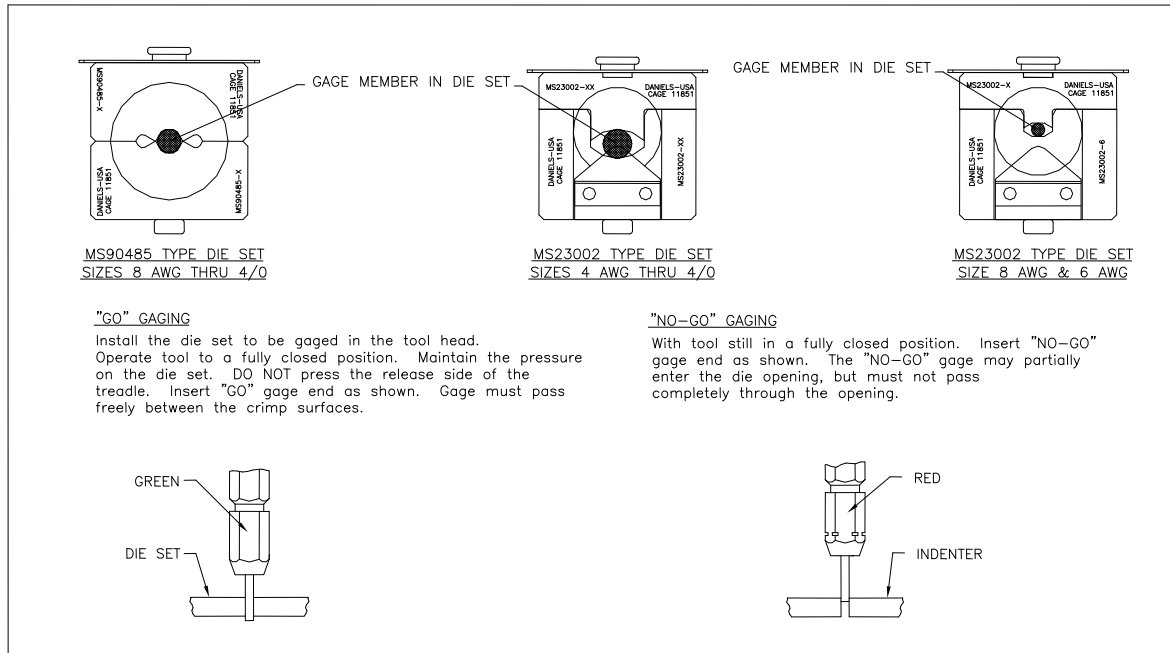
TYPICAL GAGE FOR COPPER UN-INSULATED & INSULATED TERMINALS

	A	B	C	D	E	F
1	GO/NO-GO GAGE DIMENSIONS FOR UN-INSULATED & INSULATED TERMINATIONS					
2		CRIMP DIE	A	B	C (REF)	D ±.030
3	MS90486-8	MS90485-8	+.0002/-0.0000	+.0000/-0.0002		
4	6	MS90485-6	.2078	.2120	3.12	.449
5	4	MS90485-4	.2378	.2420		.482
6	2	MS90485-2	.2968	.3010	3.59	
7	1	MS90485-1	.3748	.3790		.545
8	01	MS90485-01	.4148	.4190	4.18	
9	02	MS90485-02	.4538	.4580		.612
10	03	MS90485-03	.4978	.5020		.737
11	04	MS90485-04	.5418	.5460	4.53	.856
12	MS23003-8	MS23002-8	.6158	.6200	2.468	.360
13	6	MS23002-6	.1678	.1720		.427
14	4	MS23002-4	.1998	.2040	3.125	.490
15	2	MS23002-2	.2518	.2560		.615
16	1	MS23002-1	.3098	.3140		.552
17	01	MS23002-01	.3368	.3410	3.593	.677
18	02	MS23002-02	.3678	.3720		.740
19	03	MS23002-03	.3788	.3830	4.187	
20	04	MS23002-04	.4018	.4060		

TBHD1M (AS5259/1) 12 TON HYDRAULIC INSTALLING HEAD

DATASHEET

GO/NO-GO gaging of die sets



Terminals to be crimped with the TBHD1M

A	B	C	D
TERMINALS FOR USE WITH MS23002 DIES			
PART NO.	TERMINAL SIZE	STUD SIZE	COLOR CODE
MS25036-115	8	#10 (.190)	RED
-116		1/4 (.250)	
-117		5/16 (.3125)	
-118		3/8 (.375)	
-119	6	#10 (.190)	BLUE
-120		1/4 (.250)	
-121		5/16 (.3125)	
-122		3/8 (.375)	
-123	4	1/4 (.250)	YELLOW
-124		5/16 (.3125)	
-125		3/8 (.375)	
-126		1/4 (.250)	
-127	2	3/8 (.375)	RED
-128		1/2 (.500)	
-129		1/4 (.250)	
-130		3/8 (.375)	
-131	1	1/2 (.500)	CLEAR TO WHITE
-132		1/4 (.250)	
-133		3/8 (.375)	
-134		1/2 (.500)	
-135	0	5/16 (.3125)	BLUE
-136		3/8 (.375)	
-137		1/2 (.500)	
-138		3/8 (.375)	
-139	000	1/2 (.500)	RED
-140		3/8 (.375)	
-141		1/2 (.500)	
-142		3/8 (.375)	

A	B	C
TERMINALS FOR USE WITH 90485 DIES		
PART NO.	TERMINAL SIZE	STUD SIZE
MS20659-140	8	#8 (.164)
-107		#10 (.190)
-141		1/4 (.250)
-108		5/16 (.3125)
-129	6	3/8 (.375)
-142		1/2 (.500)
-130		#10 (.190)
-109		1/4 (.250)
-131	4	5/16 (.3125)
-110		3/8 (.375)
-143		1/2 (.500)
-144		#10 (.190)
-111	2	1/4 (.250)
-132		5/16 (.3125)
-112		3/8 (.375)
-145		1/2 (.500)
-146	1	#10 (.190)
-113		1/4 (.250)
-147		5/16 (.3125)
-114		3/8 (.375)
-148	0	7/16 (.437)
-133		1/2 (.500)
-115		1/4 (.250)
-149		5/16 (.3125)
-116	00	3/8 (.375)
-150		7/16 (.437)
-134		1/2 (.500)
-151		3/8 (.375)

A	B	C
TERMINALS FOR USE WITH 90485 DIES		
PART NO.	TERMINAL SIZE	STUD SIZE
MS20659-117	0	1/4 (.250)
-151		5/16 (.3125)
-118		3/8 (.375)
-152		7/16 (.437)
-135	00	1/2 (.500)
-153		1/4 (.250)
-119		5/16 (.3125)
-120		3/8 (.375)
-154	000	7/16 (.437)
-136		1/2 (.500)
-155		5/16 (.3125)
-121		3/8 (.375)
-156	0000	7/16 (.437)
-122		1/2 (.500)
-157		5/16 (.3125)
-123		3/8 (.375)
-158	0000	7/16 (.437)
-124		1/2 (.500)
-159		5/8 (.625)
-160		3/4 (.750)
-137	0000	7/8 (.875)
-150		1/2 (.500)
-151		3/8 (.375)
-152		7/16 (.437)

TBHD1M (AS5259/1) 12 TON HYDRAULIC INSTALLING HEAD



DATASHEET

DMC offers complete refurbishing and recalibration services.

DMC specially engineers and manufactures complete tool kits to satisfy individual customer requirements, such as total aircraft support general shop maintenance or production, on board ship and vehicle service, etc.

Limitation of Liability

DANIELS MANUFACTURING CORPORATION IS NOT LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY NATURE OR KIND RESULTING FROM THE USE, OR MISUSE, OF ANY OF ITS PRODUCTS. OWNERS AND USERS OF DMC PRODUCTS ASSUME FULL RESPONSIBILITY FOR INSTRUCTING THEIR EMPLOYEES IN THE PROPER AND SAFE USE OF SUCH PRODUCTS.

Limited Warranty

DMC (Daniels Manufacturing Corporation) warrants each new product sold by it to be free from defects in material and workmanship under normal use and service. DMC's obligation under this warranty is limited to the free correction or, at DMC's option, the refund of the purchase price of any such product which proves defective in normal service within ninety (90) days after delivery to the first user, provided that the product is returned to DMC with all transportation charges prepaid and which shall appear to DMC's satisfaction, after DMC's inspection, to have been defective in material and workmanship, it being understood that DMC products are not consumer products. This warranty shall not cover any damage to any product which, in the opinion of DMC, was caused by normal wear, misuse, improper operation, tampering, neglect or accident. This warranty is in lieu of all other warranties express or implied. No warranty, express or implied, is made or authorized to be made or assumed with respect to products of Daniels Manufacturing Corporation other than those herein set forth.