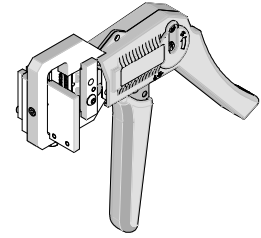


**MANUAL  
HAND TOOL**



**Application Tooling  
Specification Sheet**



**Order No. 69008-1090**

**FEATURES**

- A full cycle ratcheting hand tool ensures complete terminations
- This tool is intended for prototype, low volume, and field repair applications
- Capable of Feed-Thru and Feed –To termination.
- Hand Tool measures 200mm x 150mm x 50mm and weighs 1.65 lb (0.75kg)

**SCOPE**

Products: 1.27mm Pitch Picoflex® PF-50, Low Profile, IDT Receptacle 4 to 26 circuits, terminates 26 or 28 AWG flat cable. (1.00mm max. thickness).

Series No.	Circuit Size	Connector Order Number					
90327	4	90327-0304	90327-0351	90327-0352	90327-0353	90327-0354	90327-3304
		90327-3351	90327-3352	90327-3353	90327-3354	90327-5304	90327-5351
		90327-5352	90327-5353	90327-5354			
	6	90327-0306	90327-0355	90327-0356	90327-0357	90327-0358	90327-3306
		90327-3355	90327-3356	90327-3357	90327-3358	90327-5306	90327-5355
		90327-5356	90327-5357	90327-5358			
	8	90327-0308	90327-0359	90327-0360	90327-0361	90327-0362	90327-3308
		90327-3359	90327-3360	90327-3361	90327-3362	90327-5308	90327-5359
		90327-5360	90327-5361	90327-5362			
	10	90327-0310	90327-0363	90327-0364	90327-0365	90327-0366	90327-3310
		90327-3363	90327-3364	90327-3365	90327-3366	90327-5310	90327-5363
		90327-5364	90327-5365	90327-5366			
	12	90327-0312	90327-0367	90327-0368	90327-0369	90327-0370	90327-3312
		90327-3367	90327-3368	90327-3369	90327-3370	90327-5312	90327-5367
		90327-5368	90327-5369	90327-5370			
	14	90327-0314	90327-0371	90327-0372	90327-0373	90327-0374	90327-3314
		90327-3371	90327-3372	90327-3373	90327-3374	90327-5314	90327-5371
		90327-5372	90327-5373	90327-5374			
	16	90327-0316	90327-0375	90327-0376	90327-0377	90327-0378	90327-3316
		90327-3375	90327-3376	90327-3377	90327-3378	90327-5316	90327-5375
		90327-5376	90327-5377	90327-5378			
	18	90327-0318	90327-0379	90327-0380	90327-0381	90327-0382	90327-3318
		90327-3379	90327-3380	90327-3381	90327-3382	90327-5318	90327-5379
		90327-5380	90327-5381	90327-5382			
	20	90327-0320	90327-0383	90327-0384	90327-0385	90327-0386	90327-3320
		90327-3383	90327-3384	90327-3385	90327-3386	90327-5320	90327-5383
		90327-5384	90327-5385	90327-5386			
	22	90327-0322	90327-0391	90327-0392	90327-0393	90327-0394	90327-3322
		90327-3391	90327-3392	90327-3393	90327-3394	90327-5322	90327-5391
		90327-5392	90327-5393	90327-5394			

Series No.	Circuit Size	Connector Order Number					
	24	90327-0324	90327-0395	90327-0396	90327-0397	90327-0398	90327-3324
		90327-3395	90327-3396	90327-3397	90327-3398	90327-5324	90327-5395
		90327-5396	90327-5397	90327-5398			
	26	90327-0326	90327-0387	90327-0388	90327-0389	90327-0390	90327-3326
		90327-3387	90327-3388	90327-3389	90327-3390	90327-5326	90327-5387
		90327-5388	90327-5389	90327-5390			
90584	4	90584-1304	90584-1404	90584-2304	90584-2404	90584-9304	90584-9404
	6	90584-1306	90584-1406	90584-2306	90584-2406	90584-9306	90584-9406
	8	90584-1308	90584-1408	90584-2308	90584-2408	90584-9308	90584-9408
	10	90584-1310	90584-1410	90584-2310	90584-2410	90584-9310	90584-9410
	12	90584-1312	90584-1412	90584-2312	90584-2412	90584-9312	90584-9412
	14	90584-1314	90584-1414	90584-2314	90584-2414	90584-9314	90584-9414
	16	90584-1316	90584-1416	90584-2316	90584-2416	90584-9316	90584-9416
	18	90584-1318	90584-1418	90584-2318	90584-2418	90584-9318	90584-9418
	20	90584-1320	90584-1420	90584-2320	90584-2420	90584-9320	90584-9420
	22	90584-1322	90584-1422	90584-2322	90584-2422	90584-9322	90584-9422
	24	90584-1322	90584-1424	90584-2324	90584-2424	90584-9324	90584-9422
	26	90584-1322	90584-1426	90584-2326	90584-2426	90584-9326	90584-9422
91577	4	91577-0304	91577-1304	91577-2304			
	6	91577-0306	91577-1306	91577-2306			
	8	91577-0308	91577-1308	91577-2308			
	10	91577-0310	91577-1310	91577-2310			
	12	91577-0312	91577-1312	91577-2312			
	14	91577-0314	91577-1314	91577-2314			
	16	91577-0316	91577-1316	91577-2316			
	18	91577-0318	91577-1318	91577-2318			
	20	91577-0320	91577-1320	91577-2320			
	22	91577-0322	91577-1322	91577-2322			
	24	91577-0324	91577-1324	91577-2324			
	26	91577-0326	91577-1326	91577-2326			



Make sure work area is clean and dry and wear approved eye protection.

**SET-UP**



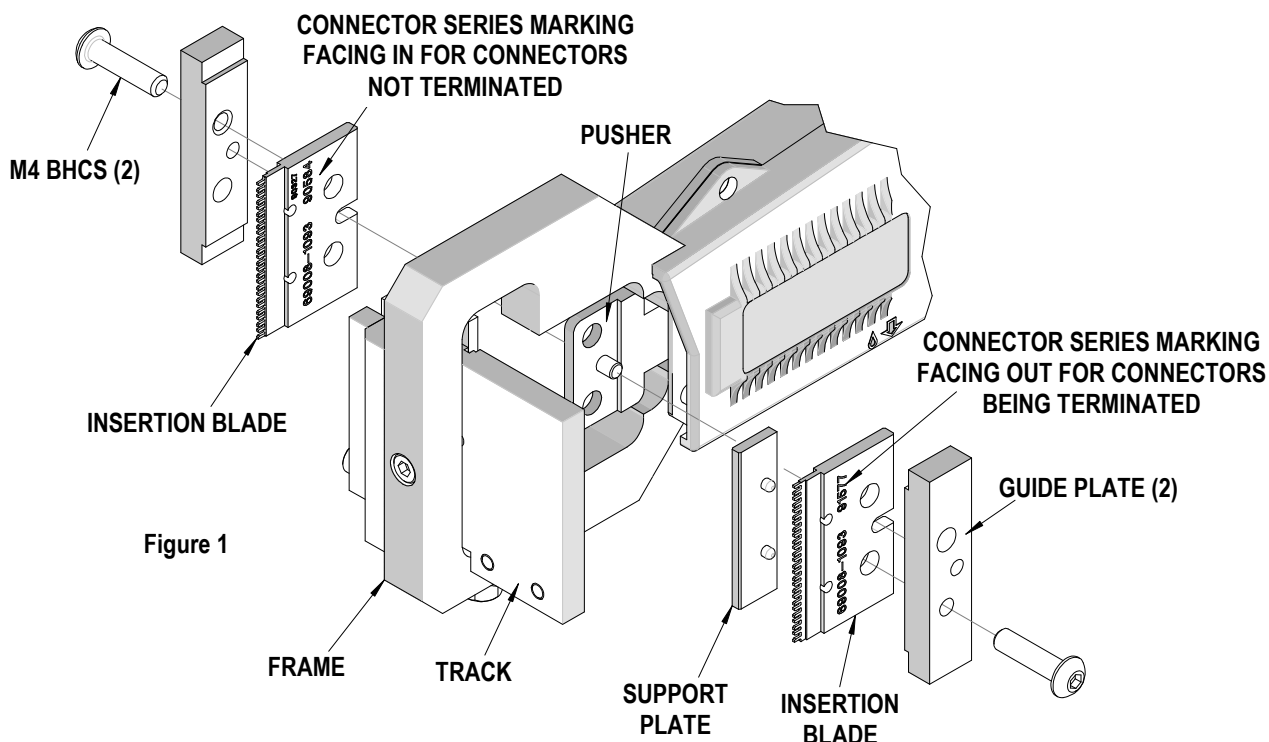
Before attempting to terminate any connectors, make sure the insertion blades are correctly placed into the pusher of the hand tool.

The insertion blades are marked with the connector series numbers on each side. Before using the hand tool check to make sure the connector series being used is marked on the blades facing out. See Figure 1.

Open the tool by squeezing the handles together, at the end of the closing stroke, the ratchet mechanism will release the handles, and the hand tool will spring open.

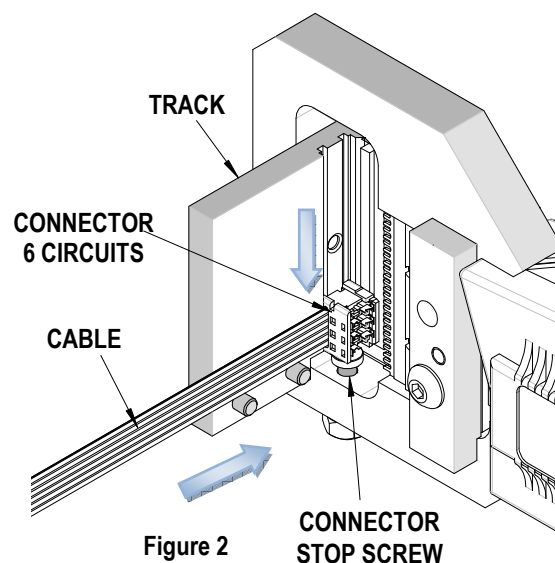
If the orientations of the insertion blades need to be changed follow the steps below:

1. Loosen and remove the M4 BHCS from one side of the hand tool.
2. Remove the guide plate.
3. Pull off the insertion blade from the support plate.
4. Turn the blade 180° and reinstall with the correct marking facing out.
5. Reinstall the guide plate and the M4 BHCS.
6. Repeat steps 1 thru 5 for the on the opposite side of the tool.



## OPERATION

1. Open the hand tool.
2. Slide the connector into the track and push until it stops against the stop screw. (Check connector orientation). See Figure 2.
3. For Feed-To Harnesses, insert the cable into the connector until it stops. For Feed-Thru Harnesses push through to pre-set mark on the cable. See Figure 3
4. With the connector seated in track correctly, squeeze the tool handles together until the full cycle ratchet releases. If the handles become jammed, see *Missed Terminations or Jams* Section.
5. Release the tool handles and let the tool open completely.
6. Remove the terminated connector from the nest.



## ADJUSTMENTS

### Connector Stop Screw

The stop screw is used to align the connector's terminals to the teeth on the insertion blade. This should not require adjustment.

If adjustment is necessary, loosen the lock nut on the stop screw and turn the screw as needed to align the terminals to the insertion blade teeth. Remember to tighten the locknut after adjustment.

### Cable Stop

The bracket on the back of the track is adjustable for Feed-To and Feed-Thru harnesses.

1. For Feed-To harnesses the bracket should fit flush and inside the track. See Figure 3.
2. For Feed-Thru harnesses unscrew the M3 SHCS.
3. Rotate the bracket 180°.
4. Tighten the M3 SHCS. See Figure 3.

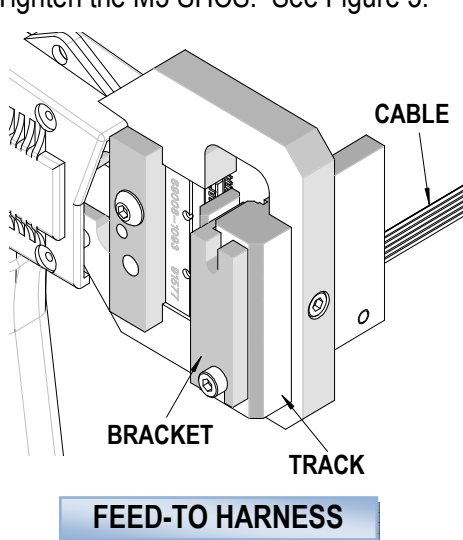
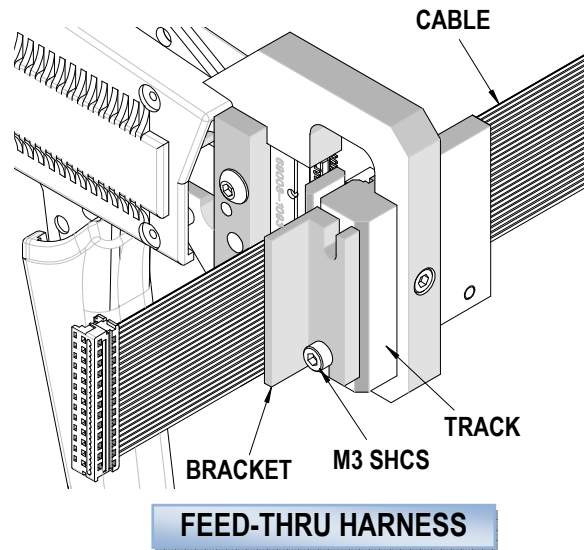


Figure 3



### Maintenance

It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

1. Disassemble the metal tool frame by removing the screws and pulling off the plastic handle. Remove dust, moisture, and other contaminants with a clean brush, or soft, lint free cloth.
2. Do not use any abrasive materials that could damage the tool.
3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively. Light oil used at the pivot points every 5,000 terminations will significantly enhance the tool life.
4. Wipe excess oil from hand tool, particularly from termination area.

### Missed Terminations or Jams

Should this tool ever become stuck or jammed in a partially closed position, **DO NOT force the handles open or closed**. The tool will open easily by pressing the ratchet release lever up. See Figure 4.

### How to Adjust Tool Preload

It may be necessary over the life of the tool to adjust tool handle preload force. Listed below are the steps required to adjust the force of the hand tool to obtain the proper termination conditions:

1. Remove the 2mm locking screw from the numbered adjusting wheel using a screw driver. See Figure 4.

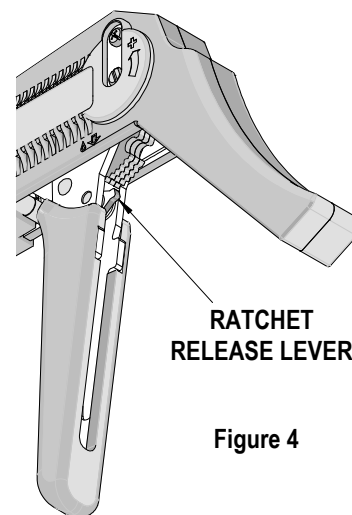


Figure 4

2. Using the same screw driver turn the adjustment wheel to the next highest number.  
 Note: The odd numbers are in clockwise (CW) direction and the even numbers are counter clockwise (CCW).
3. Example: If the preload is set at number 5, then to increase the preload, turn the adjustment wheel until the 6<sup>th</sup> position is located over the 2mm locking screw tapped hole. If it is necessary to move to the 7<sup>th</sup> position, then the adjustment wheel should be turned clockwise (CW) until the 7<sup>th</sup> position is over the 2mm locking screw tapped hole.
4. Replace the 2mm locking screw, aligning the nearest notch in the setting wheel to locking screw.
5. Check the termination specifications after the tool handle preload force is adjusted. Repeat these steps until the desired result is obtained.

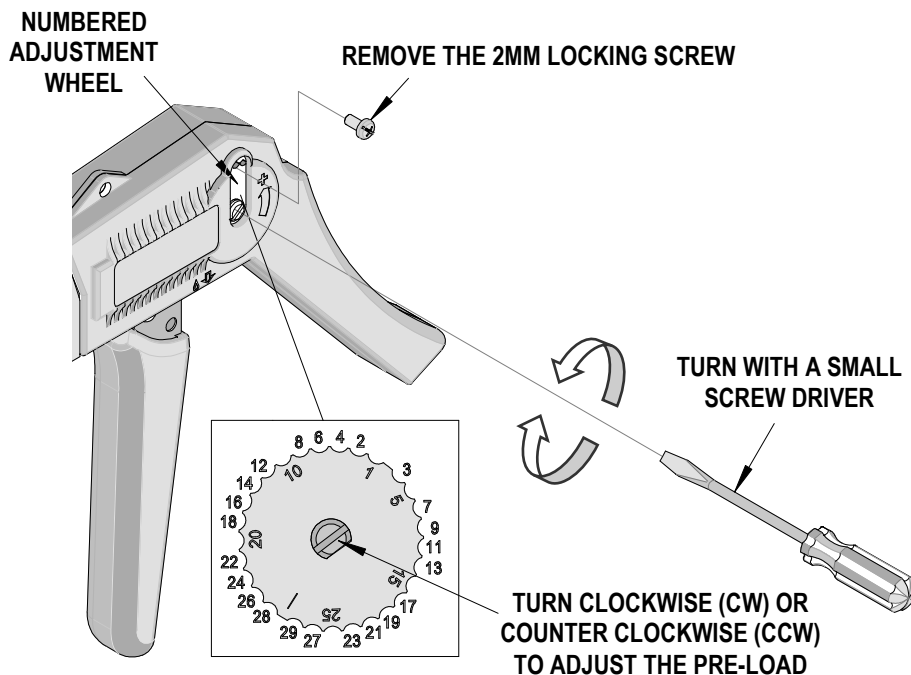


Figure 5

## Warranty

This tool is for electrical termination purposes only. All tools are warranted to be free of manufacturing defects for a period of 30 days. Should such a defect occur, we will repair or exchange the tool free of charge. This repair or exchange will not be applicable to altered, misused, or damaged tools. This tool is designed for hand use only. Any clamping, fixturing, or use of handle extensions voids this warranty.



**CAUTION:** Molex crimp specifications are valid only when used with Molex terminals and tooling.

### CAUTIONS:



1. Manually powered hand tools are intended for low volume or field repair. This tool is **NOT** intended for production use. Repetitive use of this tool should be avoided.
2. Insulated rubber handles are not protection against electrical shock. **NEVER** perform crimps on active electrical circuits.
3. Wear eye protection at all times.
4. Use only the Molex terminals specified for crimping with this tool.



# PARTS LIST

Manual Hand Tool 69008-1090				
Item	Order No	Engineering No	Description	Quantity
<b>Perishable Tooling</b>				
1	69008-1084	69008-1084	Support Plate	1
2	69008-1093	69008-1093	Insertion Blade	2
3	69008-0970	69008-0970	Spring (Main)	1
4	69008-0971	69008-0971	Spring (Ratchet)	1
5	69008-0972	69008-0972	Adjuster Wheel	1
<b>Other Components</b>				
6	69008-0703	69008-0703	Bracket	REF
7	69008-1095	69008-1095	Guide Plate	REF
<b>Hardware</b>				
8	N/A	N/A	M3 X 10 long SHCS	REF
9	N/A	N/A	M4 X 16 long BHCS	REF
** Available from an industrial supply company such as MSC (1-800-645-7270).				

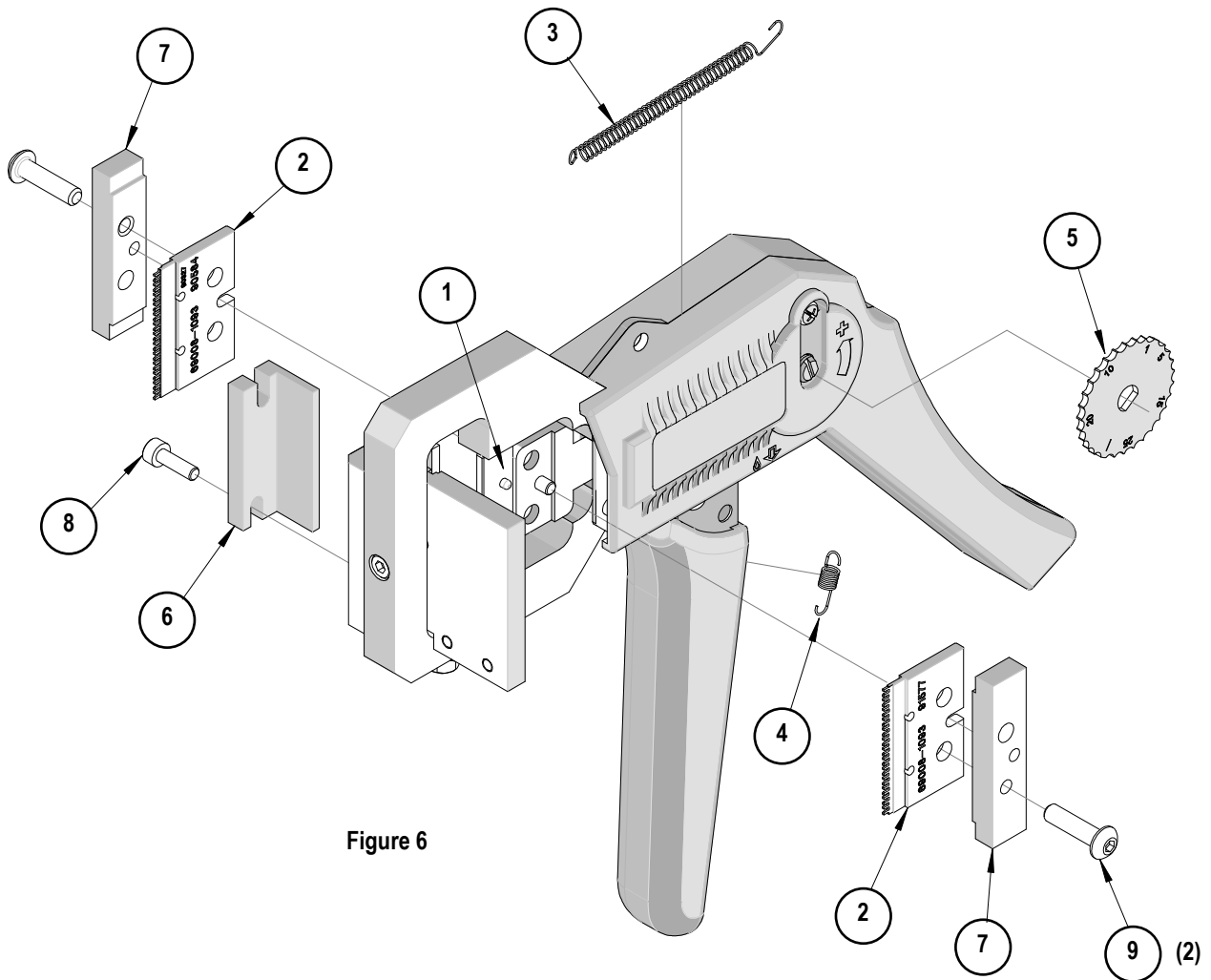


Figure 6

<http://www.molex.com>