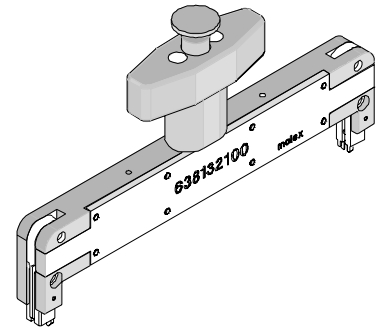**molex**®

**Module Card Extractor Tool**
**Instruction Manual**
**Part No. 63813-2100**

## FEATURES

▪ This tool is designed for the removal of the memory module card from the metal latch 87814 series Molex sockets, 1mm pitch, 276-circuit vertical press-fit with metal latch DDR2.

## SCOPE

Products:  87814 Series 276 Circuit Vertical Press-fit Metal Latch DDR2 Dimm Connector System.  See Product List below for specific part numbers.

## Product List

The following is a partial list of the product order numbers and their specifications this tool is designed to run.  Updates to this list are available on www.molex.com.

| Assembly Order Number | Description |
|---|---|
| 87814-1001 | 1.00mm (.039") Pitch DDR-2 DIMM Socket, Vertical, |
| 87814-1002 | Press-fit, 276 Circuits Metal Latch |

## DESCRIPTION

The 1mm pitch, 276-circuit vertical press-fit with metal latch DDR2 takes up a much smaller space inside the housing than a conventional latch will.  The entire connector length is almost similar to the module card.  However, the latch cannot be extracted by hand and this extraction tool is required to withdrawal the module card from the metal latch.

The Module Card Extractor Tool consists of modular card latch, metal latch, and thumb pusher with a handle.
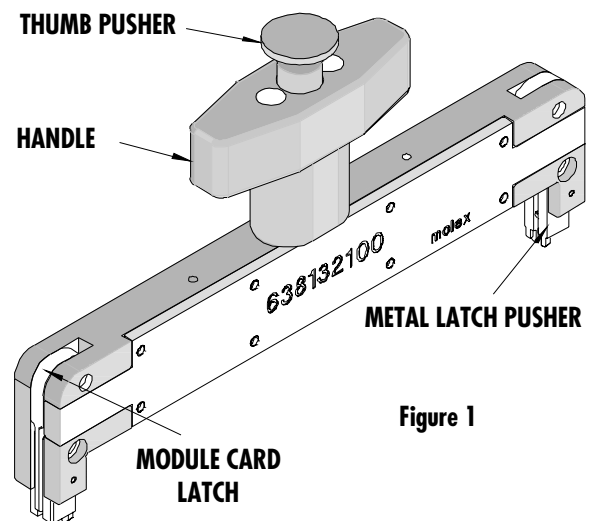
THUMB PUSHER

HANDLE

METAL LATCH PUSHER

**Figure 1**

MODULE CARD
LATCH

## Operation

1. Align the metal latch pushers (2) with the slots on the module card housing. See Figure 2.
2. Push the extractor tool down and into the slots. The module card latches are spring-loaded and will open when extractor tool is engaged in the module card housing. See Figure 3.
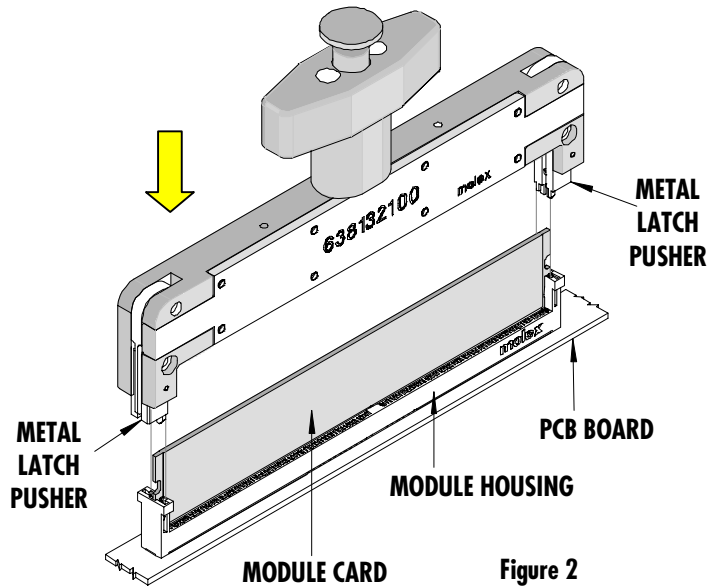
METAL LATCH PUSHER

PCB BOARD

METAL LATCH PUSHER

MODULE HOUSING

MODULE CARD

**Figure 2**

EXTRACTOR TOOL

MODULE CARD LATCHES OPEN

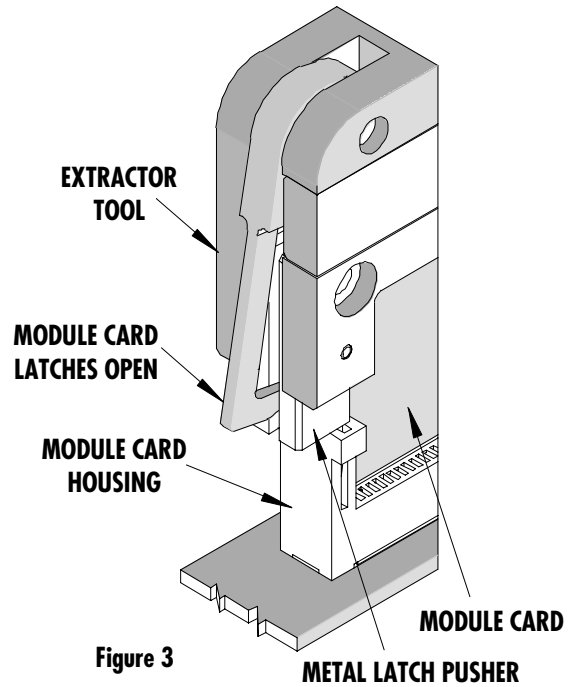MODULE CARD HOUSING

MODULE CARD

**Figure 3**

METAL LATCH PUSHER

3. Make sure the extractor tool is firmly seated in the slots of the module card housing and the module card latches are locked into the module card.
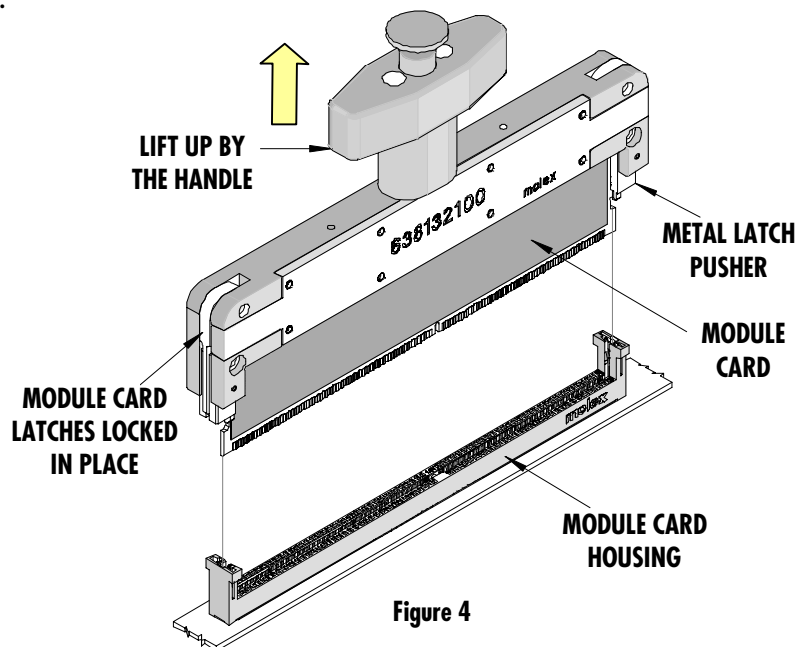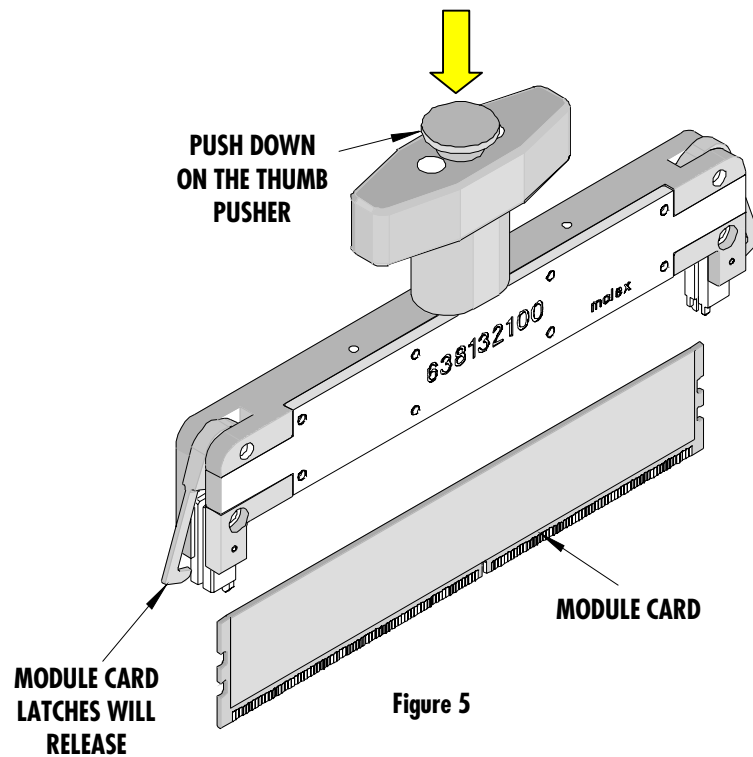
LIFT UP BY THE HANDLE

METAL LATCH PUSHER

MODULE CARD

MODULE CARD LATCHES LOCKED IN PLACE

MODULE CARD HOUSING

**Figure 4**

4. Pull the module card straight up with the handle of the extractor tool. See Figure 4.

5.   When the module card is free of the housing, press down on the thumb pusher.  This will open the module card latches and release the card from the extractor tool. See Figure 5.

PUSH DOWN
ON THE THUMB
PUSHER

MODULE CARD

MODULE CARD
LATCHES WILL
RELEASE

**Figure 5**

## Maintenance

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

1.   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.
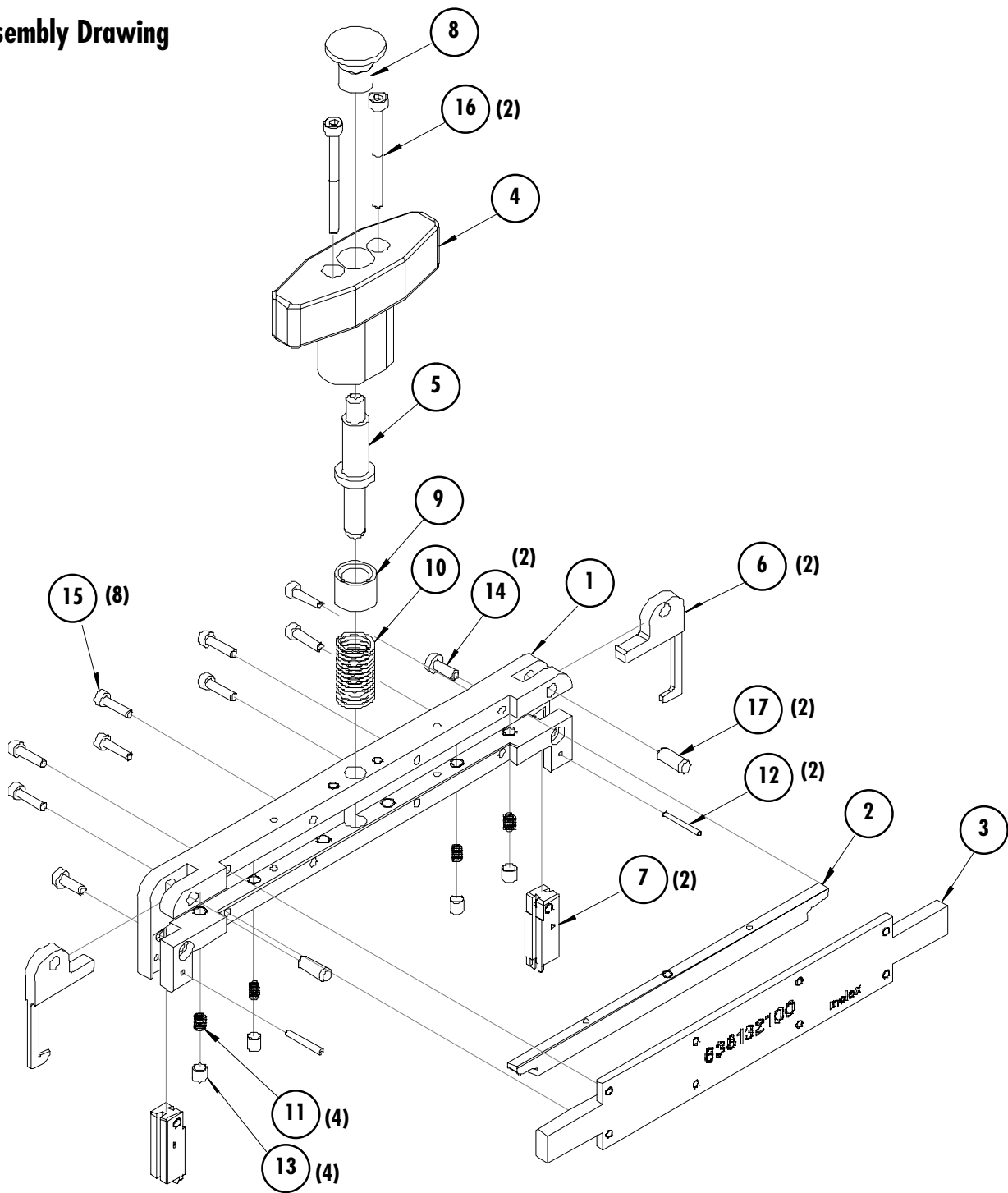4.   When tool is not in use, store in a clean, dry area.

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

## PARTS LIST

| Item | Order No | Description | Quantity |
|---|---|---|---|
| | **63813-2100** | **Module Card Extractor Tool** | **(Figure 6)** |
| 1 | 63813-2101 | Extractor Base | 1 |
| 2 | 63813-2102 | Pusher Plate | 1 |
| 3 | 63813-2103 | Base Cover | 1 |
| 4 | 63813-2204 | Handle | 1 |
| 5 | 63813-2205 | Handle Shaft | 1 |
| 6 | 63813-2206 | Module Card Latch | 2 |
| 7 | 63813-2207 | Metal Latch Pusher | 2 |
| 8 | 63600-2698 | Knob | 1 |
| 9 | 63600-2699 | Metal Bushing | 1 |
| 10 | 63600-2700 | Compression Spring | 1 |
| 11 | 63600-2701 | Compression Spring | 4 |
| 12 | 63600-2702 | 1.5mm Diameter Dowel Pin | 2 |
| 13 | 63600-2703 | M4 Screw Plug | 4 |
| 14 | 63600-2704 | M3 by 8 Long Low Head SHCS | 2 |
| 15 | N/A | M2.5 by 10 Long SHCS | **8 |
| 16 | N/A | M3 by 35 Long SHCS | **2 |
| 17 | N/A | 4mm by 10 Long Dowel Pin | **2 |

** Available from an industrial supply company such as MSC (1-800-645-7270).

**Assembly Drawing**



**Figure 6**