



**PICO**

**CORPORATION**

*Insertion / Removal  
Tool*

*Cross Reference*



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## **CONTACT INSTALLING TOOLS**



### **FRONT RELEASE REAR RELEASE**

*Installing tools in these styles are used primarily with front release connectors such as those noted below. This tool style can also be used with rear release connectors as well.*

## **CONTACT REMOVAL TOOLS**



### **FRONT RELEASE REAR REMOVAL**

*Front release removal tools in which the tool is inserted into the front of the connector to release the contact locking mechanism are used with connectors such as MIL-C-26482, MIL-C-26500, MIL-C-26518, MIL-C-38300, MIL-C-28840, MIL-C-5015, MIL-C-81659 and MIL-C-81703*

## **CONTACT INSTALLING/REMOVAL TOOLS**



### **REAR RELEASE**

*Tweezer style installing and removal tools are designed to accommodate rear release connectors such as MIL-C-38999, NAS 1599, MIL-C-005015, MIL-C-81511 and MIL-C-83723*

*These tools are available with angled tips, offset straight tips and in-line straight tips. Tools are qualified to MIL\_C-81969-1 thru / 8-10. An extensive series of mil-spec as well as custom designs are available. Pico welcomes the opportunity to design a tool to meet your specific requirements.*

### **CUSTOM DESIGNS**



*Pico also produces an extensive line of proprietary design installing and removal tools. These include plier type, impact style, in-line tips, off-set tips, plastic and*

*metal tips, spring loaded or non-spring style. Multiple tips kits and unwired contact removal tools.*

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| TOOL ID      | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION          | ILLUS |
|--------------|--------|----------|------|----------|----------------------|-------|
| 000207-0031  | VIKING | 800522   | 22   | F        | Removal Tool         | H     |
| 000407-00006 | VIKING | 101142   | 16   | F        | MS24256 Removal Tool | E     |
| 000407-0003  | VIKING | 860861   | 20   | R        | Installing tool      | A     |
| 000407-0004  | VIKING | 860402   | 20   | F        | Removal, Pins & Soc. | I     |

MANUFACTURER'S  
TOOL PART NO.

PICO PART NO.

ILLUSTRATION  
OR OUTLINE  
OF TOOL

MANUFACTURER

CONTACT  
SIZE.

"F" - SERVICE  
CONTACT FROM  
FRONT  
"R" SERVICE FROM  
REAR



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# *Connector Company*

## *Cross Reference*

| TOOL ID      | MANUFR     | PICO No. | SIZE     | SERV FRM | DESCRIPTION              | ILLUS |
|--------------|------------|----------|----------|----------|--------------------------|-------|
| 000207-0031  | VIKING     | 800522   | 22       | F        | Removal Tool             | H     |
| 000407-00006 | VIKING     | 101142   | 16       | F        | MS24256 Removal Tool     | E     |
| 000407-0003  | VIKING     | 860861   | 20       | R        | Installing tool          | A     |
| 000407-0004  | VIKING     | 860402   | 20       | F        | Removal, Pins & Soc.     | I     |
| 000407-0027  | VIKING     | 101001   | 16       | R        | MS24256 Insert. Tool     | C     |
| 00407-0603   | VIKING     | 860732   | 20       | F        | Removal Tool             | H     |
| 0148-0141    | ASTRO      | 301920   |          | R        | HandleOnly               | N     |
| 061742-04    | ELCO       | 550821   | 20       | R        | InstallingTool           | A     |
| 1 1-76~4-2   | BENDIX     | 302038   | 4        | F        | Socket Rem. Tip          | Z     |
| 1 1-8795-22  | BENDIX     | 300592   | 22       | R        | Straight Removal Tweezer | J-2   |
| 107-1001     | WINCHESTER | 881042   | 16       | F        | Removal Tool             | H     |
| 107-1005     | WINCHESTER | 881022   | 16       | F        | Removal Tool             | H     |
| 107-1007     | WINCHESTER | 880252   |          | F        | Removal Tool             | F     |
| 107-1011     | WINCHESTER | 880551   | 22       | R        | Installing Tool          | A     |
| 107-1012     | WINCHESTER | 100612   | 22       | F        | Removal Tool             | H     |
| 107-1015     | WINCHESTER | 100941   | 16       | R        | Installing Tool          | A     |
| 107-1026     | WINCHESTER | 881332   | 16       | R        | Removal Tool             | E     |
| 11-10050-1   | BENDIX     | 300505   | 22D      | R        | Unwired Contact Remover  | Q     |
| 11-10050-2   | BENDIX     | 300595   | 22       | R        | Unwired Contact Remover  | Q     |
| 11-10050-3   | BENDIX     | 300785   | 20       | R        | Unwired Contact Remover  | Q     |
| 11-10050-4   | BENDIX     | 301095   | 16       | R        | Unwired Contact Remover  | Q     |
| 11-10050-5   | BENDIX     | 301555   | 12       | R        | Unwired Contact Remover  | Q     |
| 11-10050-6   | BENDIX     | 300515   | 22M      | R        | Unwired Contact Remover  | Q     |
| 11-3675      | BENDIX     | 300653   | 12/16    | R        | Installation Kit         | N     |
| 11-3691      | BENDIX     | 301048   | 16       | R        | Off-set Tip              | Z     |
| 11-3692      | BENDIX     | 301618   | 12       | R        | 90DegreeTip              | Z     |
| 11-3693      | BENDIX     | 301628   | 12       | R        | Off-setTip               | Z     |
| 11-3694      | BENDIX     | 301058   | 16       | R        | 90 DegreeTip             | Z     |
| 11-3695      | BENDIX     | 300693   | 12/16    | F        | Removal Kit              | N     |
| 11-3696      | BENDIX     | 300608   | 12       | F        | Pin Rem.Tip              | Z     |
| 11-3697      | BENDIX     | 300618   | 16       | F        | Pin. ReinTip             | Z     |
| 11-3698.     | BENDIX     | 300628   | 12/16    | F        | Socket Rem.Tip           | Z     |
| 11-3699      | BENDIX     | 301930   |          |          | Handle Only              | Z     |
| 11-6147-1    | BENDIX     | 309994   |          |          | Connector Pliers         |       |
| 11-6781      | BENDIX     | 301001   | 16       | R        | Installing Pliers        | L     |
| 11-6782      | BENDIX     | 300901   | 20       | R        | Installing Pliers        | L     |
| 11-6783      | BENDIX     | 300408   | 20       | R        | Pin Rem.Tip              | Z     |
| 11-6784      | BENDIX     | 300398   | 20       | R        | Socket Rem. Tip          | Z     |
| 11-6900      | BENDIX     | 300503   | 16/20    | F        | Removal Kit              | N     |
| 11-6911      | BENDIX     | 301920   |          | R        | Handle Only              | N     |
| 11-7082      | BENDIX     | 301451   | 12       | R        | Installing Pliers        | L     |
| 11-7260      | BENDIX     | 300793   | 12/16/20 | F        | Removal Kit              | N     |
| 11-7345      | BENDIX     | 301281   | 16       | R        | Installing Pliers        | L     |
| 11-7370-3    | BENDIX     | 301498   | 8        | F        | Pin Rem. Tip             | Z     |
| 11-7370-4    | BENDIX     | 302328   | 4        | F        | Pin Rem. Tip             | Z     |
| 11-7370-5    | BENDIX     | 303648   | 0        | F        | Pin Rem. Tip             | Z     |
| 11-7401-10   | BENDIX     | 301841   | 10       | R        | InstallingTool           | AA    |
| 11-7401-12   | BENDIX     | 101441   | 12       | R        | Size 12 Insert. Tool     | AB    |
| 11-7401-16   | BENDIX     | 101011   | 16       | R        | Size 16 Insert. Tool     | AB    |

| TOOL ID    | MANUFR  | PICO No. | SIZE    | SERV FRM | DESCRIPTION                 | ILLUS |
|------------|---------|----------|---------|----------|-----------------------------|-------|
| 11-7401-20 | BENDIX  | 100861   | 20      | R        | M524256 Insert. Tool        | C     |
| 11-7458    | BENDIX  | 302908   | 8       | F        | Bendix Tip                  | AC    |
| 11-7458-12 | BENDIX  | 302628   | 12      | F        | Bendix Tip                  | AC    |
| 11-7458-16 | BENDIX  | 301158   | 16      | F        | Bendix Tip                  | AC    |
| 11-7458-20 | BENDIX  | 300798   | 20      | F        | Bendix Tip                  | AC    |
| 11-7674-1  | BENDIX  | 301398   | 8       | F        | Socket Rem. Tip             | Z     |
| 11-7674-3  | BENDIX  | 303448   | 0       | F        | Socket Rem. Ti              | Z     |
| 11-7736    | BENDIX  | 301291   | 16      | R        | Installing Pliers           | M     |
| 11-7763    | BENDIX  | 301441   | 12      | R        | Installing Pliers           | M     |
| 11-7837    | BENDIX  | 300663   | 8-12-16 | F        | Removal Kit                 | N     |
| 11-7880-12 | BENDIX  | 101612   | 12      | F        | Removal Tool                | E     |
| 11-7880-16 | BENDIX  | 101142   | 16      | F        | MS24256 Removal Tool        | E     |
| 11-7880-20 | BENDIX  | 100802   | 20      | F        | Removal Tool Size 16        | E     |
| 11-7880-8  | BENDIX  | 302912   | 8       | F        | Removal, Coaxial            | E     |
| 11-8107-16 | BENDIX  | 301011   | 16      | R        | Installing Plier            | L     |
| 11-8107-20 | BENDIX  | 300861   | 20      | R        | Installing Plier            | L     |
| 11-8154-1  | BENDIX  | 302882   | 8       | R        | Removal; Coaxial            | E     |
| 11-8220    | BENDIX  | 302721   | 8       | R        | Inst. Pliers Coaxial        | AD    |
| 11-8250    | BENDIX  | 300723   | 8-12-16 | F        | Removal Kit                 | N     |
| 11-8251    | BENDIX  | 301408   | 8       | F        | Socket Removal Tip          | Z     |
| 11-8252    | BENDIX  | 301388   | 8       | F        | Pin Removal Tip             | Z     |
| 11-8475    | BENDIX  | 301383   | 12-16   | F        | Removal Kit                 | N     |
| 11-8660-1  | BENDIX  | 301331   | Coax    | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| 11-8660-2  | BENDIX  | 301601   | Coax    | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| 11-8660-3  | BENDIX  | 302031   | Coax    | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| 11-8660-4  | BENDIX  | 302311   | Coax    | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| 11-8660-5  | BENDIX  | 302531   | Coax    | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| 11-8674-12 | BENDIX  | 101601   | 12      | R        | Installing Tweezer          | J-1   |
| 11-8674-16 | BENDIX  | 101091   | 16      | R        | Installing Tweezer          | J-1   |
| 11-8674-20 | BENDIX  | 100781   | 20      | R        | Installing Tweezer          | J-1   |
| 11-8674-22 | BENDIX  | 100601   | 22      | R        | Installing Tweezer          | J-1   |
| 11-8674-24 | BENDIX  | 100501   | 22D/M   | R        | Installing Tweezer          | J-1   |
| 11-8675-12 | BENDIX  | 101602   | 12      | R        | Removal Tweezer             | J-1   |
| 11-8675-16 | BENDIX  | 101092   | 16      | R        | Removal Tweezer             | J-1   |
| 11-8675-20 | BENDIX  | 100782   | 20      | F        | MS24256 Removal Tool        | E     |
| 11-8675-22 | BENDIX  | 100602   | 16      | F        | Socket Removal              | G     |
| 11-8675-24 | BENDIX  | 100502   | 22D/M   | R        | Removal Tweezer             | J-1   |
| 11-8695-20 | BENDIX  | 300782   | 20      | R        | Straight Removal Tweezer    | J-2   |
| 11-8794-12 | BENDIX  | 301591   | 12      | R        | Straight Inst. Tweezer      | J-2   |
| 11-8794-16 | BENDIX  | 301091   | 16      | R        | Straight Inst. Tweezer      | J-2   |
| 11-8794-20 | BENDIX  | 300781   | 20      | R        | Straight Inst. Tweezer      | J-2   |
| 11-8794-22 | BENDIX  | 300601   | 22      | R        | Straight Inst. Tweezer      | J-2   |
| 11-8794-24 | BENDIX  | 300501   | 22D/M   | R        | Straight Inst. Tweezer      | J-2   |
| 11-8795-12 | BENDIX  | 301602   | 12      | R        | Straight Removal Tweezer    | J-2   |
| 11-8795-16 | BENDIX  | 301092   | 16      | R        | Straight Removal Tweezer    | J-2   |
| 11-8795-24 | BENDIX  | 300502   | 22D/M   | R        | Straight Removal Tweezer    | J-2   |
| 11-8952    | BENDIX  | 300472   | 22D/M   | R        | Removal Tweezer             | J-2   |
| 11-8953-1  | BENDIX  | 300531   | 22D/M   | R        | Installing Tweezer          | JT    |
| 15513-12   | DEUTSCH | 101451   | 12      | R        | MIL-C-16482 Inst. Tools     | E     |

| TOOL ID     | MANUFR      | PICO No. | SIZE | SERV FRM | DESCRIPTION               | ILLUS |
|-------------|-------------|----------|------|----------|---------------------------|-------|
| 15513-16    | DEUTSCH     | 101001   | 16   | R        | MS24256 Insert. Tool      | C     |
| 15513-20    | DEUTSCH     | 100861   | 20   | R        | M524256 Insert. Tool      | C     |
| 200826-1    | AMP         | 100861   | 20   | R        | M524256 Insert. Tool      | C     |
| 200826-2    | AMP         | 101001   | 16   | R        | MS24256 Insert. Tool      | C     |
| 20823-2     | AMP         | 101142   | 16   | F        | MS24256 Removal Tool      | E     |
| 20823-3     | AMP         | 100782   | 20   | F        | MS24256 Removal Tool      | E     |
| 2512        | CONTINENTAL | 101042   | 16   | F        | Removal Tool              | H     |
| 2534        | CONTINENTAL | 100941   | 16   | R        | Installing Tool           | A     |
| 2558        | CONTINENTAL | 300561   | 22   | R        | Installing Tool           | A     |
| 2559        | CONTINENTAL | 100612   | 22   | F        | Removal Tool              | H     |
| 258-6018-16 | MATRIX      | 151122   | 16   | R        | Removal Tweezer           | J-1   |
| 258-6019-16 | MATRIX      | 151071   | 16   | R        |                           | A     |
| 259-600-20  | MATRIX      | 150802   | 20   | R        | Removal Tweezer           | J-1   |
| 2597        | AIRBORN     | 100482   | 22   | R        | Metal Tweezer             | J-1   |
| 2598        | AIRBORN     | 100492   | 22   | R        | Metal Tweezer             | J-2   |
| 294-123     | AMPHENOL    | 500351   |      | R        | Insertion Tool            |       |
| 294-127     | AMPHENOL    | 502552   | Coax | F        | No. 2 Shielded Contact    | E     |
| 294-128     | AMPHENOL    | 501891   | Coax | R        | No. 2 Shielded Contact    | D     |
| 294-152     | AMPHENOL    | 200402   | 20   | F        | Pin & Socket Removal Tool | I     |
| 294-155     | AMPHENOL    | 200402   | 20   | F        | Pin & Socket Removal Tool | I     |
| 294-189     | AMPHENOL    | 501852   | 16   | F        | Removal Tool              | E     |
| 294-190     | AMPHENOL    | 501751   | 10   | R        | Installing Tool           | D     |
| 294-192     | AMPHENOL    | 101011   | 16   | R        | Size 16 Insert. Tool      | AB    |
| 294-219     | AMPHENOL    | 101152   | 16   | F        | Removal Tool Size 12      | E     |
| 294-229     | AMPHENOL    | 101441   | 12   | R        | Size 12 Insert. Tool      | AB    |
| 294-230     | AMPHENOL    | 101622   | 12   | F        | Removal Tool Size 8       | E     |
| 294-235     | AMPHENOL    | 105581   | 0    | R        | Size 0 Insert. Tool       | AB    |
| 294-236     | AMPHENOL    | 103781   | 4    | R        | Size 4 Insert. Tool       | AB    |
| 294-237     | AMPHENOL    | 102601   | 8    | R        | Size 8 Insert. Tool       | AB    |
| 294-238     | AMPHENOL    | 502542   | Coax | F        | Removal Tool              | E     |
| 294-239     | AMPHENOL    | 103362   | 0    | F        | Removal Tool Size 0       | E     |
| 294-240     | AMPHENOL    | 102522   | 8    | F        | Removal Tool Size 4       | E     |
| 294-241     | AMPHENOL    | 105182   | 0    | F        | Removal Tool              | E     |
| 294-27      | AMPHENOL    | 100811   | 20   | R        | Install Pin & Sockets     | D     |
| 294-278     | AMPHENOL    | 100511   | 22   | R        | Installs Pin & Sockets    | P     |
| 294-279     | AMPHENOL    | 500791   | 20   | R        | Installs Pin & Sockets    | A     |
| 294-28      | AMPHENOL    | 100422   | 20   | F        | Pin Removal               | C     |
| 294-280     | AMPHENOL    | 100802   | 20   | F        | Removal Tool Size 16      | E     |
| 294-286     | AMPHENOL    | 100302   | 23   | F        | Pin Removal               | C     |
| 294-287     | AMPHENOL    | 100262   | 23   | F        | Socket Removal            | G     |
| 294-29      | AMPHENOL    | 100382   | 20   | F        | Socket Removal            | G     |
| 294-296     | AMPHENOL    | 100702   | 20   | F        | Size Sub 20 Removal tool  | E     |
| 294-30      | AMPHENOL    | 101041   | 16   | R        | Installs Pin & Sockets    | D     |
| 294-31      | AMPHENOL    | 100652   | 16   | F        | Pin Removal               | C     |
| 294-32      | AMPHENOL    | 100602   | 16   | F        | Socket Removal            | G     |
| 294-33      | AMPHENOL    | 101581   | 12   | R        | Installs Pins & Sockets   | D     |
| 294-34      | AMPHENOL    | 101202   | 12   | F        | Pin Removal               | C     |
| 294-35      | AMPHENOL    | 100932   | 12   | F        | Socket Removal            | G     |
| 294-39      | AMPHENOL    | 500693   | 16   | F/R      | Insertion & Removal Kit   | P     |

| TOOL ID          | MANUFR    | PICO No.     | SIZE  | SERV FRM | DESCRIPTION                      | ILLUS |
|------------------|-----------|--------------|-------|----------|----------------------------------|-------|
| 294-40           | AMPHENOL  | 599933       | 12    | F/R      | Insertion & Removal Kit          | P     |
| 294-465          | AMPHENOL  | 501099       | 16    | R        | Inst. Tip P/S                    | P     |
| 294-466          | AMPHENOL  | 500718       | 16    | F        | Pin Removal Tip                  | P     |
| 294-467          | AMPHENOL  | 500618       | 16    | F        | Soc. Removal Tip                 | P     |
| 294-468          | AMPHENOL  | 501529       | 12    | R        | Inst. Tip P/S                    | P     |
| 294-469          | AMPHENOL  | 501078       | 12    | F        | Pin Removal Tip                  | P     |
| 294-470          | AMPHENOL  | 500938       | 12    | F        | Soc. Removal Tip                 | P     |
| 294-48           | AMPHENOL  | 501252       | 16    | F        | Removal Tool                     | E     |
| 294-58           | AMPHENOL  | 500852       | 20    | F        | Removal Tool                     | E     |
| 294-66           | AMPHENOL  | 500503       | 16/20 | R        | Collet, Double-Ended Tool        | I     |
| 294-72           | AMPHENOL  | 101442       | 12    | R        | Installing Tool                  | AB    |
| 294-73           | AMPHENOL  | 101612       | 12    | F        | Removal Tool                     | E     |
| 294-88           | AMPHENOL  | 100861       | 20    | R        | M524256 Inset. Tool              | C     |
| 294-89           | AMPHENOL  | 100802       | 20    | F        | Removal Tool Size 16             | E     |
| 294-96           | AMPHENOL  | 101011       | 16    | R        | Size 16 Inset. Tool              | AB    |
| 294-97           | AMPHENOL  | 101142       | 16    | F        | MS24256 Removal Tool             | E     |
| 305141-1         | AMP       | 503022       | Coax  | F        | Removal Tool                     | E     |
| 305183-0         | AMP       | 501132       | 16/20 | F        | Removal Tool                     | E     |
| 305183-2         | AMP       | 501032       | 20    | F        | Removal Tool                     | E     |
| 356-200          | AMPHENOL  | 500003       |       |          | Handle                           | P     |
| 356-400-1        | AMPHENOL  | 500401       | 22    | R        | Min-Rac, Reliatac Pins & Sockets | A     |
| 356-400-11       | AMPHENOL  | 500331       | 22    | R        | Wire Form Pine Sockets           | A     |
| 356-400-12       | AMPHENOL  | 500292       | 22    | F        | Min-Rac-220-501 Socket           | A     |
| 356-400-13       | AMPHENOL  | 500332       | 22    | F        | Min-Rac                          | A-2   |
| 356-400-14       | AMPHENOL  | 500322       | 22    | F        | Min-Rac                          | I     |
| 356-400-15       | AMPHENOL  | 500322       | 22    | F        | Min-Rac                          | I     |
| 356-400-2        | AMPHENOL  | 500401       | 22    | R        | Min-Rac, Reliatac Pins & Sockets | A     |
| 356-400-3        | AMPHENOL  | 500401       | 22    | R        | Min-Rac, Reliatac Pins & Sockets | A     |
| 356-400-5        | AMPHENOL  | 500402       | 22    | F        | Min-Rac Pins & Sockets           | I     |
| 356-400-6        | AMPHENOL  | 500402       | 22    | F        | Min-Rac Pins & Sockets           | I     |
| 356-400-7        | AMPHENOL  | 500402       | 22    | F        | Min-Rac Pins & Sockets           | I     |
| 356-400-8        | AMPHENOL  | 500402       | 22    | F        | Min-Rac Pins & Sockets           | I     |
| 370-8040-010     | COLLINS   | 201882       | Coax  | F        | Pin & Socket Removal             | E     |
| 372-8091-010     | COLLINS   | 200262       |       | F        | Tuning Fork, Removal             |       |
| 372-8091-060     | COLLINS   | 200321       |       | R        | Installing Tweezer               | J-2   |
| 5000-026-22      | MATRIX    | 660532       | 22    | R        | Removal Tweezer                  | J-1   |
| 5120-00-005-8054 | Fed Stock | MS3323-2U    |       |          |                                  | D     |
| 5120-00-006-4536 | Fed Stock | M53342-16    |       |          |                                  | C     |
| 5120-00-006-9991 | Fed Stock | 502552       | Coax  | F        | No. 2 Shielded Contact           | E     |
| 5120-00-007-5752 | Fed Stock | M53323-16    |       |          |                                  | D     |
| 5120-00-010-6733 | Fed Stock | 200462       | 20    | F        | Pin & Socket Push Out            | I     |
| 5120-00-018-0529 | Fed Stock | M527495A16   |       |          |                                  | J     |
| 5120-00-018-0531 | Fed Stock | M527495A12   |       |          |                                  | J     |
| 5120-00-018-0535 | Fed Stock | M81969/14-02 |       |          |                                  | AG    |
| 5120-00-018-0575 | Fed Stock | M81969/14-01 |       |          |                                  | AG    |
| 5120-00-020-5926 | Fed Stock | 501132       | 16/20 | F        | Removal Tool                     | E     |
| 5120-00-032-4064 | Fed Stock | 300541       |       |          |                                  | J     |
| 5120-00-033-0249 | Fed Stock | 300608       | 12    | F        | Pin Rem. Tip                     | Z     |
| 5120-00-033-0250 | Fed Stock | 300618       | 16    | F        | Pin. ReinTip                     | Z     |

| TOOL ID          | MANUFR    | PICO No.     | SIZE    | SERV FRM | DESCRIPTION           | ILLUS |
|------------------|-----------|--------------|---------|----------|-----------------------|-------|
| 5120-00-033-0251 | Fed Stock | 300628       | 12/16   | F        | Socket Rem.Tip        | Z     |
| 5120-00-042-0998 | Fed Stock | 100941       | 16      | R        | Installing Tool       | A     |
| 5120-00-045-7170 | Fed Stock | 301408       | 8       | F        | Socket Removal Tip    | Z     |
| 5120-00-045-7171 | Fed Stock | 300723       | 8-12-16 | F        | Removal Kit           | N     |
| 5120-00-045-7179 | Fed Stock | 301388       | 8       | F        | Pin Removal Tip       | Z     |
| 5120-00-052-0796 | Fed Stock | 780521       | 22      | R        | Installing Tool       | A     |
| 5120-00-058-0218 | Fed Stock | M81969/14-04 |         |          |                       | AG    |
| 5120-00-071-3130 | Fed Stock | 200831       | 20      | R        | Installing Pliers     | M     |
| 5120-00-072-2005 | Fed Stock | 301011       | 16      | R        | Installing Plier      | L     |
| 5120-00-073-4765 | Fed Stock | 300398       | 20      | R        | Socket Rem. Tip       | Z     |
| 5120-00-078-2909 | Fed Stock | 880551       | 22      | R        | Installing Tool       | A     |
| 5120-00-079-4598 | Fed Stock | M524256A20   |         |          |                       | Z     |
| 5120-00-079-4599 | Fed Stock | M524256A16   |         |          |                       | Z     |
| 5120-00-079-4600 | Fed Stock | M524256A12   |         |          |                       | Z     |
| 5120-00-079-4601 | Fed Stock | M524256R20   |         |          |                       | F     |
| 5120-00-079-4602 | Fed Stock | M524256R16   |         |          |                       | F     |
| 5120-00-079-9461 | Fed Stock | M524256R12   |         |          |                       | F     |
| 5120-00-083-2062 | Fed Stock | 500933       |         |          |                       | N     |
| 5120-00-091-6753 | Fed Stock | 300653       | 12/16   | R        | Installation Kit      | N     |
| 5120-00-103-9708 | Fed Stock | M527495R12   |         |          |                       | J     |
| 5120-00-104-0206 | Fed Stock | 151602       | 12      | R        | Removal Tweezer       | J-1   |
| 5120-00-104-1835 | Fed Stock | 402502       | 8       | F        | Rem. Tool             | H     |
| 5120-00-104-1970 | Fed Stock | M527534-16   |         |          |                       | AG    |
| 5120-00-104-4066 | Fed Stock | M53448-001   |         |          |                       | R     |
| 5120-00-109-3227 | Fed Stock | M524256R16   |         |          |                       | E     |
| 5120-00-111-0220 | Fed Stock | 101142       | 16      | F        | MS24256 Removal Tool  | E     |
| 5120-00-113-3792 | Fed Stock | 820792       | 20      | R        | Removal Tool NAS 1599 |       |
| 5120-00-114-5120 | Fed Stock | 781252       |         |          |                       | E     |
| 5120-00-116-2821 | Fed Stock | M81969/14-04 |         |          |                       | AG    |
| 5120-00-116-7454 | Fed Stock | M81969/14-02 |         |          |                       | AG    |
| 5120-00-116-7457 | Fed Stock | M81969/14-02 |         |          |                       | AG    |
| 5120-00-116-8235 | Fed Stock | 780541       |         |          |                       | A     |
| 5120-00-117-2714 | Fed Stock | M53344-23    |         |          |                       | G     |
| 5120-00-117-3937 | Fed Stock | 200712       | 20      | R        | Removal Tweezer       | J-1   |
| 5120-00-117-4730 | Fed Stock | 100482       | 22      | R        | Metal Tweezer         | J-1   |
| 5120-00-117-7095 | Fed Stock | M53342-23    |         |          |                       | C     |
| 5120-00-118-7076 | Fed Stock | 480572       | 20      | F        | Removal Tool          | H     |
| 5120-00-122-3692 | Fed Stock | M53483-1     |         |          |                       | T     |
| 5120-00-122-3693 | Fed Stock | M53483-2     |         |          |                       | T     |
| 5120-00-122-3694 | Fed Stock | M53483-3     |         |          |                       | T     |
| 5120-00-124-3885 | Fed Stock | 200541       | 22      | R        | Installing Tool       | A     |
| 5120-00-124-4050 | Fed Stock | 823302       | Co ax   | R        | Co-Ax Removal         | A     |
| 5120-00-127-5253 | Fed Stock | 550472       |         |          |                       | J-1   |
| 5120-00-132-1960 | Fed Stock | 102601       | 8       | R        | Size 8 Insert. Tool   | AB    |
| 5120-00-132-1961 | Fed Stock | 103781       | 4       | R        | Size 4 Insert. Tool   | AB    |
| 5120-00-132-1979 | Fed Stock | 105581       | 0       | R        | Size 0 Insert. Tool   | AB    |
| 5120-00-132-2047 | Fed Stock | 101011       | 16      | R        | Size 16 Insert. Tool  | AB    |
| 5120-00-132-2051 | Fed Stock | 101441       | 12      | R        | Size 12 Insert. Tool  | AB    |
| 5120-00-132-5218 | Fed Stock | M81969/16-02 |         |          |                       | AG    |

| TOOL ID          | MANUFR    | PICO No.     | SIZE  | SERV FRM | DESCRIPTION             | ILLUS |
|------------------|-----------|--------------|-------|----------|-------------------------|-------|
| 5120-00-132-5451 | Fed Stock | M81969/16-03 |       |          |                         | AG    |
| 5120-00-132-5739 | Fed Stock | M81969/1-02  |       |          |                         | AG    |
| 5120-00-132-5791 | Fed Stock | M81969/1-01  |       |          |                         | AG    |
| 5120-00-132-5808 | Fed Stock | M81969/16-04 |       |          |                         | AG    |
| 5120-00-132-6328 | Fed Stock | M81969/16-01 |       |          |                         | AG    |
| 5120-00-133-0031 | Fed Stock | 101502       |       |          |                         | D     |
| 5120-00-133-0032 | Fed Stock | 780601       |       |          |                         | A     |
| 5120-00-133-0033 | Fed Stock | 820551       | 22    | R        | Installing Tool         |       |
| 5120-00-133-0034 | Fed Stock | 820811       | 20    | R        | Installing Tool         |       |
| 5120-00-133-0035 | Fed Stock | 821041       | 16    | R        | Installing Tool         |       |
| 5120-00-133-0096 | Fed Stock | 100382       | 20    | F        | Socket Removal          | G     |
| 5120-00-133-0097 | Fed Stock | 101152       | 16    | F        | Removal Tool Size 12    | E     |
| 5120-00-133-0098 | Fed Stock | 101622       | 12    | F        | Removal Tool Size 8     | E     |
| 5120-00-133-0099 | Fed Stock | 103362       | 0     | F        | Removal Tool Size 0     | E     |
| 5120-00-133-0138 | Fed Stock | 105581       | 0     | R        | Size 0 Insert. Tool     | AB    |
| 5120-00-133-0144 | Fed Stock | M81969/29-02 |       |          |                         | AG    |
| 5120-00-133-0147 | Fed Stock | 101202       | 12    | F        | Pin Removal             | C     |
| 5120-00-133-0149 | Fed Stock | 100422       | 20    | F        | Pin Removal             | C     |
| 5120-00-133-0155 | Fed Stock | 100932       | 12    | F        | Socket Removal          | G     |
| 5120-00-133-0158 | Fed Stock | M81969/29-03 |       |          |                         | AG    |
| 5120-00-133-0167 | Fed Stock | M81969/29-04 |       |          |                         | AG    |
| 5120-00-133-0168 | Fed Stock | 102522       | 8     | F        | Removal Tool Size 4     | E     |
| 5120-00-133-0169 | Fed Stock | 810602       | 22    | R        | Removal Tool            | J-1   |
| 5120-00-133-0170 | Fed Stock | 820572       | 22    | R        | Removal Tool            |       |
| 5120-00-133-0182 | Fed Stock | 820812       | 20    | R        | Removal Tool            |       |
| 5120-00-133-0199 | Fed Stock | 821052       | 16    | R        | Removal Tool            |       |
| 5120-00-133-0351 | Fed Stock | 100442       |       |          |                         | F     |
| 5120-00-133-0366 | Fed Stock | 100582       |       |          |                         | F     |
| 5120-00-133-0367 | Fed Stock | 100902       |       |          |                         | F     |
| 5120-00-133-0374 | Fed Stock | 101502       |       |          |                         | F     |
| 5120-00-133-3679 | Fed Stock | 831361       |       |          |                         | A     |
| 5120-00-133-3688 | Fed Stock | 830821       |       |          |                         | A     |
| 5120-00-137-9138 | Fed Stock | 100602       | 16    | F        | Socket Removal          | G     |
| 5120-00-137-9139 | Fed Stock | 300601       | 22    | R        | Straight Inst. Tweezer  | J-2   |
| 5120-00-137-9140 | Fed Stock | 100601       | 22    | R        | Installing Tweezer      | J-1   |
| 5120-00-146-6557 | Fed Stock | 100602       | 16    | F        | Socket Removal          | G     |
| 5120-00-146-6558 | Fed Stock | 100502       | 22D/M | R        | Removal Tweezer         | J-1   |
| 5120-00-146-6566 | Fed Stock | 100601       | 22    | R        | Installing Tweezer      | J-1   |
| 5120-00-148-9843 | Fed Stock | 100729       |       |          |                         | R     |
| 5120-00-148-9844 | Fed Stock | 101009       |       |          |                         | R     |
| 5120-00-148-9845 | Fed Stock | 101479       |       |          |                         | R     |
| 5120-00-149-8336 | Fed Stock | 200811       | 20    | R        | InstallingTool          | A     |
| 5120-00-153-0045 | Fed Stock | 101091       | 16    | R        | Installing Tweezer      | J-1   |
| 5120-00-156-6965 | Fed Stock | 101612       | 12    | F        | Removal Tool            | E     |
| 5120-00-156-9210 | Fed Stock | 101451       | 12    | R        | MIL-C-16482 Inst. Tools | E     |
| 5120-00-157-3138 | Fed Stock | M81969/14-04 |       |          |                         | AG    |
| 5120-00-160-7657 | Fed Stock | 300408       | 20    | R        | Pin Rem. Tip            | Z     |
| 5120-00-165-4088 | Fed Stock | 860552       |       |          |                         | H     |
| 5120-00-171-2084 | Fed Stock | M53344-16    |       |          |                         | G     |

| TOOL ID          | MANUFR    | PICO No.    | SIZE  | SERV FRM | DESCRIPTION                 | ILLUS |
|------------------|-----------|-------------|-------|----------|-----------------------------|-------|
| 5120-00-177-6966 | Fed Stock | M527495R20  |       |          |                             |       |
| 5120-00-177-6967 | Fed Stock | M527495A20  |       |          |                             |       |
| 5120-00-177-7028 | Fed Stock | M53323-20   |       |          |                             | D     |
| 5120-00-177-7029 | Fed Stock | M53344-23   |       |          |                             | G     |
| 5120-00-177-7095 | Fed Stock | M53342-23   |       |          |                             | C     |
| 5120-00-177-7201 | Fed Stock | 200532      | 22    | R        | Removal Tweezer             | J-2   |
| 5120-00-177-7207 | Fed Stock | M517806     |       |          |                             | H     |
| 5120-00-196-6592 | Fed Stock | 100612      | 22    | F        | Removal Tool                | H     |
| 5120-00-212-3932 | Fed Stock | 300693      | 12/16 | F        | Removal Kit                 | N     |
| 5120-00-223-3722 | Fed Stock | 782604      |       |          | Micro-Lead Form Tool I      | T     |
| 5120-00-230-9337 | Fed Stock | 500703      |       |          |                             |       |
| 5120-00-241-5732 | Fed Stock | 782604      |       |          | Micro-Lead Form Tool I      | T     |
| 5120-00-251-9403 | Fed Stock | M527495A22M |       |          |                             | J     |
| 5120-00-405-8633 | Fed Stock | 151601      | 12    | R        | Installing Tool             | A     |
| 5120-00-409-4206 | Fed Stock | M527495R16  |       |          |                             | J     |
| 5120-00-409-5202 | Fed Stock | 780522      | 22    | F        | Removal Tool                | H     |
| 5120-00-409-5204 | Fed Stock | M517806     |       |          |                             | H     |
| 5120-00-409-5216 | Fed Stock | M527495A16  |       |          |                             | J     |
| 5120-00-409-5217 | Fed Stock | 200801      |       |          |                             | A     |
| 5120-00-410-9854 | Fed Stock | 881042      | 16    | F        | Removal Tool                | H     |
| 5120-00-419-8535 | Fed Stock | M524256B20  |       |          |                             | A     |
| 5120-00-440-0515 | Fed Stock | S00852      |       |          |                             | E     |
| 5120-00-450-6917 | Fed Stock | 301050      |       |          |                             |       |
| 5120-00-497-4906 | Fed Stock | 301628      | 12    | R        | Off-set Tip                 | Z     |
| 5120-00-522-8601 | Fed Stock | 550972      | 20    | F        | Removal Tool                | F     |
| 5120-00-741-1260 | Fed Stock | 503022      | Coax  | F        | Removal Tool                | E     |
| 5120-00-756-5559 | Fed Stock | 552502      | 8     | R        | Coax Removal Tool           | E     |
| 5120-00-759-8946 | Fed Stock | 300862      |       |          |                             | AD    |
| 5120-00-765-3688 | Fed Stock | 300503      | 16/20 | F        | Removal Kit                 | N     |
| 5120-00-765-3689 | Fed Stock | 300901      | 20    | R        | Installing Pliers           | L     |
| 5120-00-765-3690 | Fed Stock | 301001      | 16    | R        | Installing Pliers           | L     |
| 5120-00-789-0093 | Fed Stock | 301388      | 8     | F        | Pin Removal Tip             | Z     |
| 5120-00-808-6397 | Fed Stock | 301601      | Coax  | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| 5120-00-808-6412 | Fed Stock | 780512      | 22    | F        | Removal Tool                | H     |
| 5120-00-808-6552 | Fed Stock | 302912      | 8     | F        | Removal, Coaxial            | E     |
| 5120-00-834-9622 | Fed Stock | 780671      | 20    | R        | Installing Tool             | A     |
| 5120-00-834-9630 | Fed Stock | 782212      | 8     | F        | RG 180/U Coax               | E     |
| 5120-00-845-7911 | Fed Stock | 400882      | 20    | F        | Rem. Tool                   | H     |
| 5120-00-858-1454 | Fed Stock | 551282      |       |          |                             | F     |
| 5120-00-858-1455 | Fed Stock | 550821      | 20    | R        | InstallingTool              | A     |
| 5120-00-859-3745 | Fed Stock | 552022      |       |          |                             | F     |
| 5120-00-859-9546 | Fed Stock | 501852      | 16    | F        | Removal Tool                | E     |
| 5120-00-859-9547 | Fed Stock | 501751      | 10    | R        | Installing Tool             | D     |
| 5120-00-859-9548 | Fed Stock | 501891      | Coax  | R        | No. 2 Shielded Contact      | D     |
| 5120-00-869-0728 | Fed Stock | 201702      |       | F        | Pin & Socket Impact Removal | AE    |
| 5120-00-875-6680 | Fed Stock | 781212      | 16    | F        | Removal Tool                | E     |
| 5120-00-875-6686 | Fed Stock | 780661      | 20    | R        | Installing Tool             | A     |
| 5120-00-875-6687 | Fed Stock | 780882      | 20    | F        | Removal Tool                | E     |
| 5120-00-875-6689 | Fed Stock | 302031      | Coax  | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |

| TOOL ID          | MANUFR    | PICO No.     | SIZE | SERV FRM | DESCRIPTION                 | ILLUS |
|------------------|-----------|--------------|------|----------|-----------------------------|-------|
| 5120-00-875-7785 | Fed Stock | 782022       |      |          |                             | F     |
| 5120-00-877-6314 | Fed Stock | 201601       | 12   | R        | Installing Tool             | A     |
| 5120-00-888-3449 | Fed Stock | 201111       | 16   | R        | InstallingTool              | A     |
| 5120-00-891-3049 | Fed Stock | 400671       | 20   | R        | Inst. Tool                  | AZ    |
| 5120-00-904-3510 | Fed Stock | 550821       | 20   | R        | InstallingTool              | A     |
| 5120-00-910-4885 | Fed Stock | 302031       | Coax | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| 5120-00-910-4886 | Fed Stock | 3022882      |      |          |                             | F     |
| 5120-00-915-4587 | Fed Stock | M81969/14-02 |      |          |                             | AG    |
| 5120-00-915-4588 | Fed Stock | M81969/14-03 |      |          |                             | AG    |
| 5120-00-916-2316 | Fed Stock | 550402       | 22   | R        | Removal Tool                |       |
| 5120-00-928-4419 | Fed Stock | 502542       | Coax | F        | Removal Tool                | E     |
| 5120-00-928-4895 | Fed Stock | 100941       | 16   | R        | Installing Tool             | A     |
| 5120-00-930-7259 | Fed Stock | 780522       | 22   | F        | Removal Tool                | H     |
| 5120-00-930-7260 | Fed Stock | 780272       | 22   | F        | Jack Pin Rem. Tool          | H     |
| 5120-00-930-7262 | Fed Stock | 781021       |      |          |                             | B     |
| 5120-00-930-7503 | Fed Stock | 781042       |      |          |                             | H     |
| 5120-00-930-7504 | Fed Stock | 100941       | 16   | R        | Installing Tool             | A     |
| 5120-00-935-4497 | Fed Stock | 201052       | 12   | F        | Pin & Socket Removal Tool   | I     |
| 5120-00-935-4498 | Fed Stock | 200702       | 16   | F        | Pin & Socket Push Out       | I     |
| 5120-00-941-0683 | Fed Stock | 602061       |      |          |                             | A     |
| 5120-00-941-5468 | Fed Stock | 200402       | 20   | F        | Pin & Socket Removal Tool   | I     |
| 5120-00-941-5470 | Fed Stock | 200702       | 16   | F        | Pin & Socket Push Out       | I     |
| 5120-00-941-5472 | Fed Stock | 201111       | 16   | R        | InstallingTool              | A     |
| 5120-00-942-7590 | Fed Stock | 302721       | 8    | R        | Inst. Pliers Coaxial        | AD    |
| 5120-00-947-9965 | Fed Stock | 201561       |      |          |                             | A     |
| 5120-00-948-3683 | Fed Stock | 760952       |      |          |                             | AH    |
| 5120-00-948-3684 | Fed Stock | 760402       |      |          |                             | AH    |
| 5120-00-948-3685 | Fed Stock | 760642       |      |          |                             | AH    |
| 5120-00-949-8361 | Fed Stock | 302311       | Coax | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| 5120-00-950-9592 | Fed Stock | 761081       |      |          |                             | AH    |
| 5120-00-950-9593 | Fed Stock | 761051       |      |          |                             | AH    |
| 5120-00-950-9596 | Fed Stock | 760972       |      |          |                             | AH    |
| 5120-00-950-9598 | Fed Stock | 760442       |      |          |                             | AH    |
| 5120-00-950-9602 | Fed Stock | 760622       |      |          |                             |       |
| 5120-00-954-1265 | Fed Stock | SAWG18       |      |          |                             |       |
| 5120-00-954-1272 | Fed Stock | SAWG24       |      |          |                             |       |
| 5120-00-956-3768 | Fed Stock | 761121       |      |          |                             | AH    |
| 5120-00-963-7661 | Fed Stock | 201882       | Coax | F        | Pin & Socket Removal        | E     |
| 5120-00-987-0784 | Fed Stock | 200622       |      |          |                             | AE    |
| 5120-00-987-0785 | Fed Stock | 200472       | 20   | F        | Impact Removal Pin & Socket | AE    |
| 5120-00-987-0786 | Fed Stock | 200922       | 12   | F        | Impact Removal Pin & Socket | AE    |
| 5120-00-987-7234 | Fed Stock | 551912       | 12   | F        | Removal Tool                | F     |
| 5120-00-987-7239 | Fed Stock | 301281       | 16   | R        | Installing Pliers           | L     |
| 5120-00-991-3928 | Fed Stock | 301451       | 12   | R        | Installing Pliers           | L     |
| 5120-01-005-9132 | Fed Stock | M527495A16   |      |          |                             | J     |
| 5120-01-010-7215 | Fed Stock | M527495R16   |      |          |                             | J     |
| 5120-01-015-7323 | Fed Stock | 300785       | 20   | R        | Unwired Contact Remover     | Q     |
| 5120-01-021-3180 | Fed Stock | 860461       |      |          |                             | W     |
| 5120-01-032-4064 | Fed Stock | M527495A22M  |      |          |                             | J     |

| TOOL ID          | MANUFR    | PICO No.    | SIZE  | SERV FRM | DESCRIPTION                 | ILLUS |
|------------------|-----------|-------------|-------|----------|-----------------------------|-------|
| 5120-01-037-1386 | Fed Stock | 301555      | 12    | R        | Unwired Contact Remover     | Q     |
| 5120-01-037-1387 | Fed Stock | 301095      | 16    | R        | Unwired Contact Remover     | Q     |
| 5120-01-037-1388 | Fed Stock | 300595      | 22    | R        | Unwired Contact Remover     | Q     |
| 5120-01-037-1389 | Fed Stock | 300505      | 22D   | R        | Unwired Contact Remover     | Q     |
| 5120-01-042-0997 | Fed Stock | M590455-16  |       |          |                             | AB    |
| 5120-01-042-8221 | Fed Stock | 781032      | 16    | F        | Removal Tool                | E     |
| 5120-01-050-7953 | Fed Stock | M527495R22D |       |          |                             | J     |
| 5120-01-050-7954 | Fed Stock | M527495A22D |       |          |                             | J     |
| 5120-01-053-8868 | Fed Stock | 300531      | 22D/M | R        | Installing Tweezer          | J-1   |
| 5120-01-054-4069 | Fed Stock | M524256A12  |       |          |                             | D     |
| 5120-01-062-0816 | Fed Stock | 300512      |       |          |                             | B     |
| 5120-01-066-5631 | Fed Stock | 150802      | 20    | R        | Removal Tweezer             | J-1   |
| 5120-01-066-5632 | Fed Stock | 150801      | 20    | R        | Installing Tool             | A     |
| 5120-01-088-6574 | Fed Stock | 151122      | 16    | R        | Removal Tweezer             | J-1   |
| 5120-01-101-1228 | Fed Stock | 500302      |       |          |                             |       |
| 5120-01-101-1229 | Fed Stock | 781202      |       |          |                             | E     |
| 5120-01-102-4503 | Fed Stock | 100941      | 16    | R        | Installing Tool             | A     |
| 5120-01-133-0351 | Fed Stock | M53159-22   |       |          |                             | R     |
| 5120-01-133-0366 | Fed Stock | M53159-20   |       |          |                             | R     |
| 5120-01-133-0367 | Fed Stock | M53159-16   |       |          |                             | R     |
| 5120-01-133-0374 | Fed Stock | M53159-12   |       |          |                             | R     |
| 5120-01-137-9140 | Fed Stock | M527495A22  |       |          |                             |       |
| 5120-01-146-6193 | Fed Stock | M524256A20  |       |          |                             | AB    |
| 6500-001-12      | MATRIX    | 151601      | 12    | R        | Installing Tool             | A     |
| 6500-001-12      | MATRIX    | 151602      | 12    | R        | Removal Tweezer             | i-i   |
| 6500-001-16      | MATRIX    | 151071      | 16    | R        | Installing Tool             | A     |
| 6500-001-16      | MATRIX    | 151122      | 16    | R        | Removal Tweezer             | J-1   |
| 6500-001-20      | MATRIX    | 150801      | 20    | R        | Installing Tool             | A     |
| 6500-001-20      | MATRIX    | 150802      | 20    | R        | Removal Tweezer             | J-1   |
| 6500-018-0       | MATRIX    | 105652      | 0     | R        | Removal Pliers              | T     |
| 6500-018-4       | MATRIX    | 104262      | 4     | R        | Removal Pliers              | T     |
| 6500-018-8       | MATRIX    | 102812      | 8     | R        | Removal Pliers              | T     |
| 6500-028-12      | MATRIX    | 151612      | 12    | R        | Removal Tweezer             | J-2   |
| 6500-028-16      | MATRIX    | 151132      | 16    | R        | Removal Tweezer             | J-2   |
| 6500-028-20      | MATRIX    | 150812      | 20    | R        | Removal Tweezer             | J-2   |
| 6500-029-12      | MATRIX    | 151602      | 12    | R        | Removal Tweezer             | J-2   |
| 6500-029-16      | MATRIX    | 151122      | 16    | R        | Removal Tweezer             | J-1   |
| 6500-029-20      | MATRIX    | 150802      | 20    | R        | Removal Tweezer             | J-1   |
| 6500-030-12      | MATRIX    | 821601      | 12    | R        | Installing Tool NAS 1599    | 1     |
| 6500-030-16      | MATRIX    | 821121      | 16    | R        | Installing Tool NAS 1599    |       |
| 6500-030-20      | MATRIX    | 820791      | 20    | R        | Installing Tool NAS 1599    |       |
| 6500-045-20      | MATRIX    | 200711      | 20    | R        | Plastic to Metal Equivalent | A     |
| 6500-045-20      | MATRIX    | 200762      | 20    | R        | Removal Tweezer             | J-1   |
| 652636           | HUGHES    | 780522      | 22    | F        | Removal Tool                | H     |
| 700-1130-000     | FLT CONN  | 105182      | 0     | F        | Removal Tool                | E     |
| 700-1262-000     | FLT CONN  | 105581      | 0     | R        | Size 0 Inset. Tool          | AB    |
| 704-1134-000     | FLT CONN  | 103362      | 0     | F        | Removal Tool Size 0         | E     |
| 704-1260-000     | FLT CONN  | 103591      | 4     | R        | Installing Tool             | AB    |
| 708-1138-000     | FLT CONN  | 102522      | 8     | F        | Removal Tool Size 4         | E     |

| TOOL ID          | MANUFR      | PICO No. | SIZE  | SERV FRM | DESCRIPTION                    | ILLUS |
|------------------|-------------|----------|-------|----------|--------------------------------|-------|
| 708-1258-000     | FLT CONN    | 102601   | 8     | R        | Size 8 Insert. Tool            | AB    |
| 712-1172-000     | FLT CONN    | 101622   | 12    | F        | Removal Tool Size 8            | E     |
| 712-1229-000     | FLT CONN    | 101441   | 12    | R        | Size 12 Insert. Tool           | AB    |
| 716-1168-000     | FLT CONN    | 101152   | 16    | F        | Removal Tool Size 12           | E     |
| 716-1227-000     | FLT CONN    | 101011   | 16    | R        | Size 16 Insert. Tool           | AB    |
| 722698-328       | HUGHES      | 101022   | 16    | F        | Removal Tool                   | H     |
| 722698-329       | HUGHES      | 780703   |       |          | Term ipoint Clip Transfer Tool |       |
| 722699-224       | HUGHES      | 782604   |       |          | Micro-Lead Form Tool I         |       |
| 847-101-COTO-1   | G & H TECH  | 820551   | 22    | R        | Installing Tool                |       |
| 847-101-COTO-3   | G & H TECH  | 820811   | 20    | R        | Installing Tool                |       |
| 847-101-COTO-5   | G & H TECH  | 821041   | 16    | R        | Installing Tool                |       |
| 847-101-COTO-7   | G & H TECH  | 820572   | 22    | R        | Removal Tool                   |       |
| 847-101-COTO-8   | G & H TECH  | 820812   | 20    | R        | Removal Tool                   |       |
| 847-101-COTO-9   | G & H TECH  | 821052   | 16    | R        | Removal Tool                   |       |
| 866-1078-COTO-3  | G & H TECH  | 820481   | 22    | R        | Installing & Rem.              |       |
| 866-1078-COTO-4  | G & H TECH  | 820701   | 20    | R        | Installing Tool                |       |
| 882-94           | G & H TECH  | 821102   | 16    | R        | Removal Tweezer                | J-1   |
| 885-277-COTO-002 | G & H TECH  | 820782   | 20    | R        | Series IV Rem. Breech-lek      | J-1   |
| 885-277-COTO-003 | G & H TECH  | 821092   | 16    | R        | Series IV Rem. Breech-lek      | J-1   |
| 885-277-COTO-QOI | G & H TECH  | 820512   | 22D   | R        | Series IV Rem. Breech-lek      | J-1   |
| 90-0001-022      | MATRIX      | 660461   | 22    | R        | Installing Tool                |       |
| 90-0002-022      | MATRIX      | 660522   | 22    | F        | Removing Tool                  | H     |
| 9081             | POSITRONICS | 901042   | 16    | F        | Removal                        | H     |
| 9099             | POSITRONICS | 100941   | 16    | R        | Installing Tool                | A     |
| 91002-1          | AMP         | 500851   | 16/20 | R        | Type 3 Insert. Tool            | A     |
| 91039-1          | AMP         | 100761   | 20    | R        | Size Sub Insert tool           | A     |
| 91039-2          | AMP         | 100861   | 20    | R        | M524256 Insert. Tool           | C     |
| 91039-3          | AMP         | 101011   | 16    | R        | Size 16 Insert. Tool           | AB    |
| 91039-4          | AMP         | 101441   | 12    | R        | Size 12 Insert. Tool           | AB    |
| 91039-5          | AMP         | 102601   | 8     | R        | Size 8 Insert. Tool            | AB    |
| 91039-6          | AMP         | 103781   | 4     | R        | Size 4 Insert. Tool            | AB    |
| 91039-7          | AMP         | 105581   | 0     | R        | Size 0 Insert. Tool            | AB    |
| 91040-1          | AMP         | 100702   | 20    | F        | Size Sub 20 Removal tool       | E     |
| 91040-2          | AMP         | 100802   | 20    | F        | Removal Tool Size 16           | E     |
| 91040-3          | AMP         | 101152   | 16    | F        | Removal Tool Size 12           | E     |
| 91040-4          | AMP         | 101622   | 12    | F        | Removal Tool Size 8            | E     |
| 91040-5          | AMP         | 102522   | 8     | F        | Removal Tool Size 4            | E     |
| 91040-6          | AMP         | 103362   | 0     | F        | Removal Tool Size 0            | E     |
| 91040-7          | AMP         | 105182   | 0     | F        | Removal Tool                   | E     |
| 998-062          | G & H TECH  | 820791   | 20    | R        | Installing Tool NAS 1599       |       |
| 998-063          | G & H TECH  | 820792   | 20    | R        | Removal Tool NAS 1599          |       |
| 998-102          | G & H TECH  | 821121   | 16    | R        | InstallingToolNAS 1599         |       |
| 998-103          | G & H TECH  | 821601   | 12    | R        | Installing Tool NAS 1599       | 1     |
| 998-104          | G & H TECH  | 821901   | 8     | R        | InstallingToolNAS 1599         | 1     |
| 998-105          | G & H TECH  | 820791   | 20    | R        | Installing Tool NAS 1599       |       |
| 998-142-001      | G & H TECH  | 823302   | Co ax | R        | Co-Ax Removal                  |       |
| 998-145-001      | G & H TECH  | 820501   | 22    | R        | Installing Tweezer             | J-1   |
| 998-145-002      | G & H TECH  | 820502   | 22    | R        | Removal Tweezer                | J-1   |
| 998-145-003      | G & H TECH  | 820761   | 20    | R        | Installing Tweezer             | J-1   |

| TOOL ID      | MANUFR     | PICO No. | SIZE  | SERV FRM | DESCRIPTION                        | ILLUS |
|--------------|------------|----------|-------|----------|------------------------------------|-------|
| 998-145-004  | G & H TECH | 820762   | 20    | R        | Removal Tweezer                    | J-1   |
| 998-145-005  | G & H TECH | 821011   | 16    | R        | Installing Tweezer                 | J-1   |
| 998-145-006  | G & H TECH | 821012   | 16    | R        | Removal Tweezer                    | J-1   |
| A 305183     | ASTRO      | 501132   | 16/20 | F        | Removal Tool                       | E     |
| A 305183     | ASTRO      | 501132   | 16/20 | F        | Removal Tool                       | E     |
| AT 1000-12   | ASTRO      | 111431   |       |          |                                    |       |
| AT 1000-12-T | ASTRO      | 111438   |       |          |                                    |       |
| AT 1000-16   | ASTRO      | 110991   |       |          |                                    |       |
| AT 1000-16-T | ASTRO      | 110998   |       |          |                                    |       |
| AT 1000-20   | ASTRO      | 110851   |       |          |                                    |       |
| AT 1000-20-T | ASTRO      | 110858   |       |          |                                    |       |
| AT 1012      | ASTRO      | 111441   |       |          |                                    |       |
| AT 1012-T    | ASTRO      | 111448   |       |          |                                    |       |
| AT 1016      | ASTRO      | 111001   |       |          |                                    |       |
| AT 1016-T    | ASTRO      | 111008   |       |          |                                    |       |
| AT 1020      | ASTRO      | 110861   |       |          |                                    |       |
| AT 1020-B    | ASTRO      | 110671   |       |          |                                    |       |
| AT 1020-B-T  | ASTRO      | 110678   |       |          |                                    |       |
| AT 1020-T    | ASTRO      | 110868   |       |          |                                    |       |
| AT 2012      | ASTRO      | 101612   | 12    | F        | Removal Tool                       | E     |
| AT 2012-T    | ASTRO      | 101619   |       |          |                                    |       |
| AT 2016      | ASTRO      | 101142   | 16    | F        | MS24256 Removal Tool               | E     |
| AT 2016-T    | ASTRO      | 101149   |       |          |                                    |       |
| AT 2020      | ASTRO      | 100802   | 20    | F        | Removal Tool Size 16               | E     |
| AT 2020-L    | ASTRO      | 940802   |       |          |                                    |       |
| AT 2020-L-T  | ASTRO      | 400809   |       |          |                                    |       |
| AT 2020-T    | ASTRO      | 100809   |       |          |                                    |       |
| AT 2046      | ASTRO      | 100462   |       |          |                                    |       |
| AT 2597      | ASTRO      | 100482   | 22    | R        | Metal Tweezer                      | J-1   |
| AT 2598      | ASTRO      | 100492   | 22    | R        | Metal Tweezer                      | J-2   |
| AT 4000      | ASTRO      | 950461   |       |          |                                    |       |
| AT 4000-T    | ASTRO      | 950468   |       |          |                                    |       |
| AT 4001      | ASTRO      | 110631   |       |          |                                    |       |
| AT 4001-T    | ASTRO      | 110638   |       |          |                                    |       |
| AT 4002      | ASTRO      | 110931   |       |          |                                    |       |
| AT 4002-T    | ASTRO      | 110938   |       |          |                                    |       |
| AT 4003      | ASTRO      | 110641   |       |          |                                    |       |
| AT 4003-T    | ASTRO      | 110648   |       |          |                                    |       |
| AT 4004      | ASTRO      | 110921   |       |          |                                    |       |
| AT 4004-T    | ASTRO      | 110928   |       |          |                                    |       |
| AT 5000      | ASTRO      | 780512   | 22    | F        | Removal Tool                       | H     |
| AT 5000-T    | ASTRO      | 780519   |       |          |                                    |       |
| AT 5001      | ASTRO      | 110892   |       |          |                                    |       |
| AT 5001-T    | ASTRO      | 110899   |       |          |                                    |       |
| AT 5002      | ASTRO      | 111042   |       |          |                                    |       |
| AT 5002-T    | ASTRO      | 111049   |       |          |                                    |       |
| ATA 1033     | ASTRO      | 500331   | 22    | R        | Wire Form Pine Sockets             | A     |
| ATA 1033-T   | ASTRO      | 500338   |       |          |                                    |       |
| ATA 1040     | ASTRO      | 500401   | 22    | R        | "Min-Rac, Reliatac Pins & Sockets" | A     |

| TOOL ID      | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION             | ILLUS |
|--------------|--------|----------|------|----------|-------------------------|-------|
| ATA 1040-T   | ASTRO  | 500408   |      |          |                         |       |
| ATA 1050     | ASTRO  | 950501   |      |          |                         |       |
| ATA 1050-T   | ASTRO  | 950508   |      |          |                         |       |
| ATA 1051     | ASTRO  | 100511   | 22   | R        | Installs Pin & Sockets  | P     |
| ATA 1051-T   | ASTRO  | 100518   |      |          |                         |       |
| ATA 1052     | ASTRO  | 950511   |      |          |                         |       |
| ATA 1052-S   | ASTRO  | 950521   |      |          |                         |       |
| ATA 1052-S-T | ASTRO  | 950528   |      |          |                         |       |
| ATA 1052-T   | ASTRO  | 950518   |      |          |                         |       |
| ATA 1075     | ASTRO  | 500751   |      |          |                         |       |
| ATA 1075-T   | ASTRO  | 500758   |      |          |                         |       |
| ATA 1079     | ASTRO  | 100811   | 20   | R        | Install Pin & Sockets   | D     |
| ATA 1079     | ASTRO  | 500791   | 20   | R        | Installs Pin & Sockets  | A     |
| ATA 1079-T   | ASTRO  | 500798   |      |          |                         |       |
| ATA 1080     | ASTRO  | 100791   |      |          |                         |       |
| ATA 1086     | ASTRO  | 100861   | 20   | R        | M524256 Insert. Tool    | C     |
| ATA 1101     | ASTRO  | 101001   | 16   | R        | MS24256 Insert. Tool    | C     |
| ATA 1102     | ASTRO  | 111041   |      |          |                         |       |
| ATA 1102     | ASTRO  | 111042   |      |          |                         |       |
| ATA 1102-T   | ASTRO  | 111048   |      |          |                         |       |
| ATA 1104     | ASTRO  | 101041   | 16   | R        | Installs Pin & Sockets  | D     |
| ATA 1114     | ASTRO  | 501099   | 16   | R        | Inst. Tip P/S           | P     |
| ATA 1144     | ASTRO  | 101441   | 12   | R        | Size 12 Insert. Tool    | AB    |
| ATA 1158     | ASTRO  | 101581   | 12   | R        | Installs Pins & Sockets | D     |
| ATA 1159     | ASTRO  | 111591   |      |          |                         |       |
| ATA 1159-S   | ASTRO  | 111581   |      |          |                         |       |
| ATA 1159-S-T | ASTRO  | 111588   |      |          |                         |       |
| ATA 1159-T   | ASTRO  | 111598   |      |          |                         |       |
| ATA 1175     | ASTRO  | 501751   | 10   | R        | Installing Tool         | D     |
| ATA 1186     | ASTRO  | 951861   |      |          |                         |       |
| ATA 1186-T   | ASTRO  | 951868   |      |          |                         |       |
| ATA 1189     | ASTRO  | 501891   | Coax | R        | No. 2 Shielded Contact  | D     |
| ATA 1234     | ASTRO  | 952341   |      |          |                         |       |
| ATA 1234-M   | ASTRO  | 952338   |      |          |                         |       |
| ATA 2026     | ASTRO  | 100262   | 23   | F        | Socket Removal          | G     |
| ATA 2026-T   | ASTRO  | 100269   |      |          |                         |       |
| ATA 2029     | ASTRO  | 500292   | 22   | F        | Min-Rac-220-501 Socket  | A     |
| ATA 2029-T   | ASTRO  | 500299   |      |          |                         |       |
| ATA 2030     | ASTRO  | 100302   | 23   | F        | Pin Removal             | C     |
| ATA 2032     | ASTRO  | 100322   |      |          |                         |       |
| ATA 2032-T   | ASTRO  | 100329   |      |          |                         |       |
| ATA 2033     | ASTRO  | 500332   | 22   | F        | Min-Rac                 | A-2   |
| ATA 2033-L   | ASTRO  | 500342   |      |          |                         |       |
| ATA 2033-L-T | ASTRO  | 500349   |      |          |                         |       |
| ATA 2033-T   | ASTRO  | 500339   |      |          |                         |       |
| ATA 2038     | ASTRO  | 100382   | 20   | F        | Socket Removal          | G     |
| ATA 2038-T   | ASTRO  | 100389   |      |          |                         |       |
| ATA 2040     | ASTRO  | 500402   | 22   | F        | Min-Rac Pins & Sockets  | I     |
| ATA 2040-T   | ASTRO  | 500409   |      |          |                         |       |

| TOOL ID        | MANUFR | PICO No. | SIZE  | SERV FRM | DESCRIPTION               | ILLUS |
|----------------|--------|----------|-------|----------|---------------------------|-------|
| ATA 2042       | ASTRO  | 100422   | 20    | F        | Pin Removal               | C     |
| ATA 2042       | ASTRO  | 100422   | 20    | F        | Pin Removal               | C     |
| ATA 2060       | ASTRO  | 100592   |       |          |                           |       |
| ATA 2060-T     | ASTRO  | 100599   |       |          |                           |       |
| ATA 2065       | ASTRO  | 100652   | 16    | F        | Pin Removal               | C     |
| ATA 2073       | ASTRO  | 950732   |       |          |                           |       |
| ATA 2073-T     | ASTRO  | 950739   |       |          |                           |       |
| ATA 2079       | ASTRO  | 950792   |       |          |                           |       |
| ATA 2079-T     | ASTRO  | 950799   |       |          |                           |       |
| ATA 2085       | ASTRO  | 500852   | 20    | F        | Removal Tool              | E     |
| ATA 2085-T     | ASTRO  | 500859   |       |          |                           |       |
| ATA 2093       | ASTRO  | 100932   | 12    | F        | Socket Removal            | G     |
| ATA 2093-T     | ASTRO  | 100939   |       |          |                           |       |
| ATA 2112       | ASTRO  | 951122   |       |          |                           |       |
| ATA 2112-T     | ASTRO  | 951129   |       |          |                           |       |
| ATA 2120       | ASTRO  | 101202   | 12    | F        | Pin Removal               | C     |
| ATA 2125       | ASTRO  | 501252   | 16    | F        | Removal Tool              | E     |
| ATA 2125-T     | ASTRO  | 501259   |       |          |                           |       |
| ATA 2185       | ASTRO  | 501852   | 16    | F        | Removal Tool              | E     |
| ATA 2185-T     | ASTRO  | 501859   |       |          |                           |       |
| ATA 2254       | ASTRO  | 502542   | Coax  | F        | Removal Tool              | E     |
| ATA 2254-T     | ASTRO  | 502549   |       |          |                           |       |
| ATA 2255       | ASTRO  | 502552   | Coax  | F        | No. 2 Shielded Contact    | E     |
| ATA 2255-T     | ASTRO  | 502559   |       |          |                           |       |
| ATA 2348-12    | ASTRO  | 950932   |       |          |                           |       |
| ATA 2348-12-T  | ASTRO  | 950939   |       |          |                           |       |
| ATA 2348-16    | ASTRO  | 950602   |       |          |                           |       |
| ATA 2348-16-T  | ASTRO  | 950609   |       |          |                           |       |
| ATA 2348-20    | ASTRO  | 950402   |       |          |                           |       |
| ATA 2348-20-T  | ASTRO  | 950409   |       |          |                           |       |
| ATA 2348-22    | ASTRO  | 950302   |       |          |                           |       |
| ATA 2348-22-T  | ASTRO  | 950309   |       |          |                           |       |
| ATA 2348-222   | ASTRO  | 950292   |       |          |                           |       |
| ATA 2348-222-T | ASTRO  | 950299   |       |          |                           |       |
| ATA 3032       | ASTRO  | 500323   |       |          |                           |       |
| ATA 3035       | ASTRO  | 500603   |       |          |                           |       |
| ATA 3050       | ASTRO  | 500503   | 16/20 | R        | Collet, Double-Ended Tool | I     |
| ATA 3050-T     | ASTRO  | 500509   |       |          |                           |       |
| ATA 3069       | ASTRO  | 500693   | 16    | F/R      | Insertion & Removal Kit   | P     |
| ATA 3095       | ASTRO  | 500933   |       |          |                           |       |
| ATA 3120       | ASTRO  | 951203   |       |          |                           |       |
| ATA 3482       | ASTRO  | 950603   |       |          |                           |       |
| ATA 3482-T     | ASTRO  | 950608   |       |          |                           |       |
| ATAMP 1056     | ASTRO  | 500561   |       |          |                           |       |
| ATAMP 1056-T   | ASTRO  | 500568   |       |          |                           |       |
| ATAMP 1085     | ASTRO  | 500851   | 16/20 | R        | Type 3 Insert. Tool       | A     |
| ATAMP 1085-T   | ASTRO  | 500858   |       |          |                           |       |
| ATAMP 1231     | ASTRO  | 952311   |       |          |                           |       |
| ATAMP 1231-T   | ASTRO  | 952318   |       |          |                           |       |

| TOOL ID      | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION                            | ILLUS |
|--------------|--------|----------|------|----------|--|-------|
| ATAMP 2071   | ASTRO  | 500712   |      |          |  |       |
| ATAMP 2103   | ASTRO  | 501032   | 20   | F        | Removal Tool                           | E     |
| ATAMP 2103-T | ASTRO  | 501039   |      |          |  |       |
| ATAMP 2250   | ASTRO  | 502502   |      |          |  |       |
| ATAMP 2302   | ASTRO  | 503022   | Coax | F        | Removal Tool                           | E     |
| ATAMP 2302-T | ASTRO  | 503029   |      |          |  |       |
| ATAMP 3070   | ASTRO  | 780703   |      |          | Term ipoint Clip Transfer Tool         |       |
| ATB 1064     | ASTRO  | 100671   |      |          |  |       |
| ATB 1066     | ASTRO  | 400661   |      |          |  |       |
| ATB 1066-T   | ASTRO  | 400668   |      |          |  |       |
| ATB 1067     | ASTRO  | 400671   | 20   | R        | Inst. Tool                             | AZ    |
| ATB 1067-R   | ASTRO  | 400709   | 20   | R        | Tip for RTM 20-5                       | C     |
| ATB 1067-T   | ASTRO  | 400678   |      |          |  |       |
| ATB 1068     | ASTRO  | 110681   |      |          |  |       |
| ATB 1068-T   | ASTRO  | 110688   |      |          |  |       |
| ATB 2053     | ASTRO  | 400532   |      |          |  |       |
| ATB 2070     | ASTRO  | 400702   |      |          |  |       |
| ATB 2080     | ASTRO  | 400802   | 20   | F        | MIL-C-26636 Rem. Tool                  | E     |
| ATB 2080-T   | ASTRO  | 400809   |      |          |  |       |
| ATB 2088     | ASTRO  | 400882   | 20   | F        | Rem. Tool                              |       |
| ATB 2088-T   | ASTRO  | 400889   |      |          |  |       |
| ATB 2089     | ASTRO  | 400892   |      |          |  |       |
| ATB 2089-T   | ASTRO  | 400899   |      |          |  |       |
| ATB 2114     | ASTRO  | 401142   | 16   | F        | MIL-G-26636 Rem. Tool                  | E     |
| ATB 2114-T   | ASTRO  | 401149   |      |          |  |       |
| ATB 3062-2   | ASTRO  | 400614   | 22   | R        | Installing Removal Tool YHMM-22-1 Pins |       |
| ATB 3062-4   | ASTRO  | 400644   | 22   | R        | Installing Removal Tool YHMM-22-1 Pins |       |
| ATBL 1050    | ASTRO  | 310501   |      |          |  |       |
| ATBL 1051    | ASTRO  | 310511   |      |          |  |       |
| ATBL 1051-T  | ASTRO  | 310518   |      |          |  |       |
| ATBL 1060    | ASTRO  | 310601   |      |          |  |       |
| ATBL 1061    | ASTRO  | 310611   |      |          |  |       |
| ATBL 1061-T  | ASTRO  | 310618   |      |          |  |       |
| ATBL 1078    | ASTRO  | 310781   |      |          |  |       |
| ATBL 1079    | ASTRO  | 310791   |      |          |  |       |
| ATBL 1079-T  | ASTRO  | 310798   |      |          |  |       |
| ATBL 1109    | ASTRO  | 311091   |      |          |  |       |
| ATBL 1110    | ASTRO  | 301081   |      |          |  |       |
| ATBL 1110-T  | ASTRO  | 301088   |      |          |  |       |
| ATBL 1160    | ASTRO  | 311601   |      |          |  |       |
| ATBL 1161    | ASTRO  | 311611   |      |          |  |       |
| ATBL 1161-T  | ASTRO  | 311618   |      |          |  |       |
| ATBL 2050    | ASTRO  | 310502   |      |          |  |       |
| ATBL 2060    | ASTRO  | 310602   |      |          |  |       |
| ATBL 2078    | ASTRO  | 310782   |      |          |  |       |
| ATBL 2109    | ASTRO  | 311092   |      |          |  |       |
| ATBX 1--7082 | ASTRO  | 301451   | 12   | R        | Installing Pliers                      | L     |
| ATBX 1-6781  | ASTRO  | 301001   | 16   | R        | Installing Pliers                      | L     |
| ATBX 1-6782  | ASTRO  | 300901   | 20   | R        | Installing Pliers                      | L     |

| TOOL ID         | MANUFR | PICO No. | SIZE  | SERV FRM | DESCRIPTION            | ILLUS |
|-----------------|--------|----------|-------|----------|------------------------|-------|
| ATBX 1-7082     | ASTRO  | 301451   | 12    | R        | Installing Pliers      | L     |
| ATBX 1-7345     | ASTRO  | 301281   | 16    | R        | Installing Pliers      | L     |
| ATBX 1-7736     | ASTRO  | 301291   | 16    | R        | Installing Pliers      | M     |
| ATBX 1-7763     | ASTRO  | 301441   | 12    | R        | Installing Pliers      | M     |
| ATBX 1-8107-16  | ASTRO  | 301011   | 16    | R        | Installing Plier       | L     |
| ATBX 1-8107-20  | ASTRO  | 300861   | 20    | R        | Installing Plier       | L     |
| ATBX 1-8220     | ASTRO  | 302721   | 8     | R        | Inst. Pliers Coaxial   | AD    |
| ATBX 1023-T     | ASTRO  | 302038   | 4     | F        | Socket Rem. Tip        | Z     |
| ATBX 1028       | ASTRO  | 320281   |       |          |                        |       |
| ATBX 1028-T     | ASTRO  | 320288   |       |          |                        |       |
| ATBX 1046       | ASTRO  | 320461   |       |          |                        |       |
| ATBX 1046-135   | ASTRO  | 320471   |       |          |                        |       |
| ATBX 1046-90    | ASTRO  | 320451   |       |          |                        |       |
| ATBX 1048       | ASTRO  | 100501   | 22D/M | R        | Installing Tweezer     | J-1   |
| ATBX 1049       | ASTRO  | 320491   |       |          |                        |       |
| ATBX 1049-135   | ASTRO  | 320541   |       |          |                        |       |
| ATBX 1049-135-T | ASTRO  | 320548   |       |          |                        |       |
| ATBX 1049-90    | ASTRO  | 320501   |       |          |                        |       |
| ATBX 1049-90-T  | ASTRO  | 320508   |       |          |                        |       |
| ATBX 1049-S     | ASTRO  | 320481   |       |          |                        |       |
| ATBX 1049-S-T   | ASTRO  | 320488   |       |          |                        |       |
| ATBX 1049-T     | ASTRO  | 320498   |       |          |                        |       |
| ATBX 1051       | ASTRO  | 320511   |       |          |                        |       |
| ATBX 1052       | ASTRO  | 320521   |       |          |                        |       |
| ATBX 1052-T     | ASTRO  | 320528   |       |          |                        |       |
| ATBX 1053       | ASTRO  | 320531   |       |          |                        |       |
| ATBX 1054       | ASTRO  | 300501   | 22D/M | R        | Straight Inst. Tweezer | J-2   |
| ATBX 1055       | ASTRO  | 320551   |       |          |                        |       |
| ATBX 1055-S     | ASTRO  | 320561   |       |          |                        |       |
| ATBX 1055-T     | ASTRO  | 320558   |       |          |                        |       |
| ATBX 1057       | ASTRO  | 320571   |       |          |                        |       |
| ATBX 1058       | ASTRO  | 100601   | 22    | R        | Installing Tweezer     | J-1   |
| ATBX 1059       | ASTRO  | 320591   |       |          |                        |       |
| ATBX 1059-S     | ASTRO  | 320601   |       |          |                        |       |
| ATBX 1060       | ASTRO  | 300601   | 22    | R        | Straight Inst. Tweezer | J-2   |
| ATBX 1070       | ASTRO  | 320701   |       |          |                        |       |
| ATBX 1071       | ASTRO  | 320711   |       |          |                        |       |
| ATBX 1071-T     | ASTRO  | 320718   |       |          |                        |       |
| ATBX 1072       | ASTRO  | 100781   | 20    | R        | Installing Tweezer     | J-1   |
| ATBX 1073       | ASTRO  | 320731   |       |          |                        |       |
| ATBX 1073-5     | ASTRO  | 320721   |       |          |                        |       |
| ATBX 1073-S-T   | ASTRO  | 320728   |       |          |                        |       |
| ATBX 1073-T     | ASTRO  | 320738   |       |          |                        |       |
| ATBX 1075       | ASTRO  | 320751   |       |          |                        |       |
| ATBX 1078       | ASTRO  | 300781   | 20    | R        | Straight Inst. Tweezer | J-2   |
| ATBX 1079       | ASTRO  | 320791   |       |          |                        |       |
| ATBX 11-6784    | ASTRO  | 300398   | 20    | R        | Socket Rem. Tip        | Z     |
| ATBX 1103       | ASTRO  | 321031   |       |          |                        |       |
| ATBX 1103-90    | ASTRO  | 321041   |       |          |                        |       |

| TOOL ID        | MANUFR | PICO No. | SIZE     | SERV FRM | DESCRIPTION                 | ILLUS |
|----------------|--------|----------|----------|----------|-----------------------------|-------|
| ATBX 1107      | ASTRO  | 321071   |          |          |                             |       |
| ATBX 1107-S    | ASTRO  | 321081   |          |          |                             |       |
| ATBX 1107-S-T  | ASTRO  | 321088   |          |          |                             |       |
| ATBX 1107-T    | ASTRO  | 321078   |          |          |                             |       |
| ATBX 1108      | ASTRO  | 101091   | 16       | R        | Installing Tweezer          | J-1   |
| ATBX 1109      | ASTRO  | 301091   | 16       | R        | Straight Inst. Tweezer      | J-2   |
| ATBX 1133      | ASTRO  | 301331   | Coax     | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| ATBX 1133-T    | ASTRO  | 301338   |          |          |                             |       |
| ATBX 1154      | ASTRO  | 321541   |          |          |                             |       |
| ATBX 1154-90   | ASTRO  | 321551   |          |          |                             |       |
| ATBX 1154-90-T | ASTRO  | 321558   |          |          |                             |       |
| ATBX 1154-T    | ASTRO  | 321548   |          |          |                             |       |
| ATBX 1157      | ASTRO  | 101601   | 12       | R        | Installing Tweezer          | J-1   |
| ATBX 1159      | ASTRO  | 321591   |          |          |                             |       |
| ATBX 1160      | ASTRO  | 301601   | Coax     | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| ATBX 1160-T    | ASTRO  | 301608   |          |          |                             |       |
| ATBX 1203      | ASTRO  | 302031   | Coax     | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| ATBX 1231      | ASTRO  | 302311   | Coax     | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| ATBX 1231-T    | ASTRO  | 302318   |          |          |                             |       |
| ATBX 1253      | ASTRO  | 302531   | Coax     | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| ATBX 1253-T    | ASTRO  | 302538   |          |          |                             |       |
| ATBX 2-3695    | ASTRO  | 300693   | 12/16    | F        | Removal Kit                 | N     |
| ATBX 2-3696    | ASTRO  | 300608   | 12       | F        | Pin Rem. Tip                | Z     |
| ATBX 2-3697    | ASTRO  | 300618   | 16       | F        | Pin. Rein Tip               | Z     |
| ATBX 2-3698    | ASTRO  | 300628   | 12/16    | F        | Socket Rem. Tip             | Z     |
| ATBX 2-6783    | ASTRO  | 300408   | 20       | R        | Pin Rem. Tip                | Z     |
| ATBX 2-6784    | ASTRO  | 300398   | 20       | R        | Socket Rem. Tip             | Z     |
| ATBX 2-6900    | ASTRO  | 300503   | 16/20    | F        | Removal Kit                 | N     |
| ATBX 2-7260    | ASTRO  | 300793   | 12/16/20 | F        | Removal Kit                 | N     |
| ATBX 2-8250    | ASTRO  | 300723   | 8-12-16  | F        | Removal Kit                 | N     |
| ATBX 2-8251    | ASTRO  | 301408   | 8        | F        | Socket Removal Tip          | Z     |
| ATBX 2-8252    | ASTRO  | 301388   | 8        | F        | Pin Removal Tip             | Z     |
| ATBX 2-8475    | ASTRO  | 301383   | 12-16    | F        | Removal Kit                 | N     |
| ATBX 2046      | ASTRO  | 100502   | 22D/M    | R        | Removal Tweezer             | J-1   |
| ATBX 2047      | ASTRO  | 300462   |          |          |                             |       |
| ATBX 2048      | ASTRO  | 110482   |          |          |                             |       |
| ATBX 2048-S    | ASTRO  | 110472   |          |          |                             |       |
| ATBX 2050      | ASTRO  | 300502   | 22D/M    | R        | Straight Removal Tweezer    | i-2   |
| ATBX 2052      | ASTRO  | 300522   |          |          |                             |       |
| ATBX 2057      | ASTRO  | 100602   | 16       | F        | Socket Removal              | G     |
| ATBX 2057-S    | ASTRO  | 300592   | 22       | R        | Straight Removal Tweezer    | J-2   |
| ATBX 2058      | ASTRO  | 300582   |          |          |                             |       |
| ATBX 2058-S    | ASTRO  | 300572   |          |          |                             |       |
| ATBX 2059      | ASTRO  | 300592   | 22       | R        | Straight Removal Tweezer    | J-2   |
| ATBX 2070      | ASTRO  | 100782   | 20       | F        | MS24256 Removal Tool        | E     |
| ATBX 2071      | ASTRO  | 300712   |          |          |                             |       |
| ATBX 2073      | ASTRO  | 300782   | 20       | R        | Straight Removal Tweezer    | J-2   |
| ATBX 2075      | ASTRO  | 320752   |          |          |                             |       |
| ATBX 2103      | ASTRO  | 101092   | 16       | R        | Removal Tweezer             | J-1   |

| TOOL ID       | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION                 | ILLUS |
|---------------|--------|----------|------|----------|-----------------------------|-------|
| ATBX 2109     | ASTRO  | 301092   | 16   | R        | Straight Removal Tweezer    | J-2   |
| ATBX 2155     | ASTRO  | 101602   | 12   | R        | Removal Tweezer             | J-1   |
| ATBX 2160     | ASTRO  | 301602   | 12   | R        | Straight Removal Tweezer    | J-2   |
| ATBX 2277     | ASTRO  | 302772   |      |          |                             |       |
| ATBX 2288     | ASTRO  | 302882   | 8    | R        | Removal; Coaxial            | E     |
| ATBX 2288-T   | ASTRO  | 302889   |      |          |                             |       |
| ATBX 2291     | ASTRO  | 302912   | 8    | F        | "Removal, Coaxial"          | E     |
| ATBX 2291-T   | ASTRO  | 302918   |      |          |                             |       |
| ATBX 3-6147-1 | ASTRO  | 309994   |      |          | Connector Pliers            |       |
| ATBX 3050     | ASTRO  | 320503   |      |          |                             |       |
| ATBX 3050-T   | ASTRO  | 320509   |      |          |                             |       |
| ATC 1032      | ASTRO  | 200321   |      | R        | Installing Tweezer          | J-2   |
| ATC 1046      | ASTRO  | 200461   | 22   | R        | Installing Tool             | J-1   |
| ATC 1052      | ASTRO  | 200521   | 22   | R        | Installing Tool             | A     |
| ATC 1052-T    | ASTRO  | 200528   |      |          |                             |       |
| ATC 1053      | ASTRO  | 200531   | 22   | R        | Installing Tool             | A     |
| ATC 1053-T    | ASTRO  | 200538   |      |          |                             |       |
| ATC 1054      | ASTRO  | 200541   | 22   | R        | Installing Tool             | A     |
| ATC 1054-S    | ASTRO  | 200561   |      |          |                             |       |
| ATC 1054-S-T  | ASTRO  | 200568   |      |          |                             |       |
| ATC 1054-T    | ASTRO  | 200548   |      |          |                             |       |
| ATC 1055      | ASTRO  | 200551   | 20   | R        | Installing Tool             | A     |
| ATC 1055-T    | ASTRO  | 200558   |      |          |                             |       |
| ATC 1071      | ASTRO  | 200711   | 20   | R        | Plastic to Metal Equivalent | A     |
| ATC 1071-T    | ASTRO  | 200718   |      |          |                             |       |
| ATC 1072      | ASTRO  | 200721   | 20   | R        | InstallingTool              | A     |
| ATC 1072-T    | ASTRO  | 200728   |      |          |                             |       |
| ATC 1076-L    | ASTRO  | 200771   |      |          |                             |       |
| ATC 1079      | ASTRO  | 200791   | 20   | R        | Installing Tool             | A     |
| ATC 1079-T    | ASTRO  | 200798   |      |          |                             |       |
| ATC 1080      | ASTRO  | 200801   |      |          |                             |       |
| ATC 1080-T    | ASTRO  | 200808   |      |          |                             |       |
| ATC 1081      | ASTRO  | 200811   | 20   | R        | InstallingTool              | A     |
| ATC 1081-T    | ASTRO  | 200818   |      |          |                             |       |
| ATC 1084      | ASTRO  | 200841   | 20   | R        | Installinq Tool             | A     |
| ATC 1084-T    | ASTRO  | 200848   |      |          |                             |       |
| ATC 1111      | ASTRO  | 201111   | 16   | R        | InstallingTool              | A     |
| ATC 1111-1    | ASTRO  | 201131   | 16   | R        | Installing Tool             | A     |
| ATC 1111-1-T  | ASTRO  | 201138   |      |          |                             |       |
| ATC 1111-T    | ASTRO  | 201118   |      |          |                             |       |
| ATC 1112      | ASTRO  | 201121   | 16   | R        | Installing Tool             | A     |
| ATC 1112-T    | ASTRO  | 201128   |      |          |                             |       |
| ATC 1156      | ASTRO  | 201871   | Coax | F        | Coax DP*m Inst. Tool        | A     |
| ATC 1156-M    | ASTRO  | 201861   |      |          |                             |       |
| ATC 1156-M-T  | ASTRO  | 201868   |      |          |                             |       |
| ATC 1156-T    | ASTRO  | 201878   |      |          |                             |       |
| ATC 1160      | ASTRO  | 201601   | 12   | R        | Installing Tool             | A     |
| ATC 1160-T    | ASTRO  | 201608   |      |          |                             |       |
| ATC 1265      | ASTRO  | 202651   | 8    | R        | Installing Tool             | A     |

| TOOL ID      | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION                 | ILLUS |
|--------------|--------|----------|------|----------|-----------------------------|-------|
| ATC 1265-T   | ASTRO  | 202658   |      |          |                             |       |
| ATC 1377     | ASTRO  | 203771   | 4    | R        | Installing Tool             | A     |
| ATC 1377-T   | ASTRO  | 203778   |      |          |                             |       |
| ATC 2025     | ASTRO  | 200262   |      | F        | Tuning Fork, Removal        | K     |
| ATC 2025-T   | ASTRO  | 200269   |      |          |                             |       |
| ATC 2026     | ASTRO  | 200262   |      | F        | Tuning Fork, Removal        | K     |
| ATC 2035     | ASTRO  | 200352   | 22   | F        | Removal Centi-Lok Pins      | A     |
| ATC 2035-T   | ASTRO  | 200359   |      |          |                             |       |
| ATC 2036     | ASTRO  | 200362   | 22   | F        | Removal Centi-Lok Socket    | A     |
| ATC 2036-T   | ASTRO  | 200369   |      |          |                             |       |
| ATC 2040     | ASTRO  | 200402   | 20   | F        | Pin & Socket Removal Tool   | I     |
| ATC 2040-L   | ASTRO  | 200412   | 20   | F        | Pin & Socket Push Out       | I     |
| ATC 2040-L-T | ASTRO  | 200419   |      |          |                             |       |
| ATC 2040-T   | ASTRO  | 200409   |      |          |                             |       |
| ATC 2046     | ASTRO  | 200462   | 20   | F        | Pin & Socket Push Out       | I     |
| ATC 2046-L   | ASTRO  | 200472   | 20   | F        | Impact Removal Pin & Socket | AE    |
| ATC 2046-L-T | ASTRO  | 200479   |      |          |                             |       |
| ATC 2046-T   | ASTRO  | 200469   |      |          |                             |       |
| ATC 2052     | ASTRO  | 200522   |      |          |                             |       |
| ATC 2053     | ASTRO  | 200532   | 22   | R        | Removal Tweezer             | J-2   |
| ATC 2053-70  | ASTRO  | 200542   |      |          |                             |       |
| ATC 2062     | ASTRO  | 200622   |      |          |                             |       |
| ATC 2070     | ASTRO  | 200702   | 16   | F        | Pin & Socket Push Out       | I     |
| ATC 2070-T   | ASTRO  | 200709   |      |          |                             |       |
| ATC 2071     | ASTRO  | 200712   | 20   | R        | Removal Tweezer             | J-1   |
| ATC 2073     | ASTRO  | 200732   | 20   | R        | Removal Tweezer             | J-1   |
| ATC 2076     | ASTRO  | 200762   | 20   | R        | Removal Tweezer             | J-1   |
| ATC 2076-L-S | ASTRO  | 200742   |      |          |                             |       |
| ATC 2092     | ASTRO  | 200922   | 12   | F        | Impact Removal Pin & Socket | AE    |
| ATC 2105     | ASTRO  | 201052   | 12   | F        | Pin & Socket Removal Tool   | I     |
| ATC 2105-T   | ASTRO  | 201059   |      |          |                             |       |
| ATC 2136     | ASTRO  | 201362   | 16   | R        | Removal Tweezer             | i-i   |
| ATC 2150     | ASTRO  | 201502   | 8    | F        | Pin & Socket Removal        | I     |
| ATC 2150-T   | ASTRO  | 201509   |      |          |                             |       |
| ATC 2160     | ASTRO  | 151602   | 12   | R        | Removal Tweezer             | J-1   |
| ATC 2170     | ASTRO  | 201702   |      | F        | Pin & Socket Impact Removal | AE    |
| ATC 2184     | ASTRO  | 201842   | 12   | R        | Removal Tweezer             | J-1   |
| ATC 2188     | ASTRO  | 201882   | Coax | F        | Pin & Socket Removal        | E     |
| ATC 2188-T   | ASTRO  | 201889   |      |          |                             |       |
| ATC 2200     | ASTRO  | 202002   | Coax | F        | Pin & Socket Impact Removal | AE    |
| ATC 2234     | ASTRO  | 202342   | 4    | F        | Pin & Socket Removal        | I     |
| ATC 2234-T   | ASTRO  | 202349   |      |          |                             |       |
| ATC 2276     | ASTRO  | 202762   |      | F        | Pin & Socket Impact Removal | E     |
| ATC 2276-T   | ASTRO  | 202769   |      |          |                             |       |
| ATC 2281     | ASTRO  | 102812   | 8    | R        | Removal Pliers              | T     |
| ATC 2426     | ASTRO  | 104262   | 4    | R        | Removal Pliers              | T     |
| ATC 2565     | ASTRO  | 105652   | 0    | R        | Removal Pliers              | T     |
| ATC 3035     | ASTRO  | 200353   |      |          |                             |       |
| ATC 3050     | ASTRO  | 200503   |      |          |                             |       |

| TOOL ID        | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION               | ILLUS |
|----------------|--------|----------|------|----------|---------------------------|-------|
| ATC 3050-T     | ASTRO  | 200508   |      |          |                           |       |
| ATC 3074       | ASTRO  | 950743   |      |          |                           |       |
| ATC 3075       | ASTRO  | 950753   |      |          |                           |       |
| ATC 3076       | ASTRO  | 950763   |      |          |                           |       |
| ATC 3077       | ASTRO  | 950773   |      |          |                           |       |
| ATC 3078       | ASTRO  | 950783   |      |          |                           |       |
| ATC 3079       | ASTRO  | 950793   |      |          |                           |       |
| ATC 3079-T     | ASTRO  | 950798   |      |          |                           |       |
| ATC 3080       | ASTRO  | 950803   |      |          |                           |       |
| ATC 3080-T     | ASTRO  | 950808   |      |          |                           |       |
| ATC 3081       | ASTRO  | 950813   |      |          |                           |       |
| ATC 3081-T     | ASTRO  | 950818   |      |          |                           |       |
| ATC 3082       | ASTRO  | 950823   |      |          |                           |       |
| ATC 3082-T     | ASTRO  | 950828   |      |          |                           |       |
| ATC 3083       | ASTRO  | 950833   |      |          |                           |       |
| ATC 3083-T     | ASTRO  | 950838   |      |          |                           |       |
| ATC 3084       | ASTRO  | 950843   |      |          |                           |       |
| ATC 3084-T     | ASTRO  | 950848   |      |          |                           |       |
| ATC 3085       | ASTRO  | 950853   |      |          |                           |       |
| ATC 3085-T     | ASTRO  | 950858   |      |          |                           |       |
| ATC 3086       | ASTRO  | 950863   |      |          |                           |       |
| ATC 3086-T     | ASTRO  | 950868   |      |          |                           |       |
| ATC 3087       | ASTRO  | 950873   |      |          |                           |       |
| ATC 3087-T     | ASTRO  | 950878   |      |          |                           |       |
| ATC 3088       | ASTRO  | 950883   |      |          |                           |       |
| ATC 3088-T     | ASTRO  | 950888   |      |          |                           |       |
| ATC 3090       | ASTRO  | 950903   |      |          |                           |       |
| ATC 3090-T     | ASTRO  | 950908   |      |          |                           |       |
| ATC 3091       | ASTRO  | 950913   |      |          |                           |       |
| ATC 3091-T     | ASTRO  | 950918   |      |          |                           |       |
| ATCK 3128      | ASTRO  | 951283   |      |          |                           |       |
| ATCL 2061      | ASTRO  | 100612   | 22   | F        | Removal Tool              | H     |
| ATCL 2061-T    | ASTRO  | 100619   |      |          |                           |       |
| ATCO 2061      | ASTRO  | 110612   |      |          |                           |       |
| ATCO 2061-T    | ASTRO  | 110619   |      |          |                           |       |
| ATCS 1105      | ASTRO  | 201051   | 20   | R        | Installing Tool Sure-Seal | A     |
| ATCS 1105-T    | ASTRO  | 201058   |      |          |                           |       |
| ATD 1035       | ASTRO  | 550351   |      |          |                           |       |
| ATD 1035-135   | ASTRO  | 550341   |      |          |                           |       |
| ATD 1035-135-T | ASTRO  | 550348   |      |          |                           |       |
| ATD 1035-T     | ASTRO  | 550358   |      |          |                           |       |
| ATD 1036       | ASTRO  | 550361   |      |          |                           |       |
| ATD 1036-T     | ASTRO  | 550368   |      |          |                           |       |
| ATD 1049       | ASTRO  | 550481   |      |          |                           |       |
| ATD 1049-T     | ASTRO  | 550488   |      |          |                           |       |
| ATD 1061       | ASTRO  | 550611   |      |          |                           |       |
| ATD 1061-T     | ASTRO  | 550618   |      |          |                           |       |
| ATD 1081       | ASTRO  | 550821   | 20   | R        | InstallingTool            | A     |
| ATD 1081-S     | ASTRO  | 550811   |      |          |                           |       |

| TOOL ID      | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION          | ILLUS |
|--------------|--------|----------|------|----------|----------------------|-------|
| ATD 1081-S-T | ASTRO  | 550818   |      |          |                      |       |
| ATD 1081-T   | ASTRO  | 550828   |      |          |                      |       |
| ATD 1094     | ASTRO  | 550941   |      |          |                      |       |
| ATD 1094-T   | ASTRO  | 550948   |      |          |                      |       |
| ATD 1206     | ASTRO  | 552061   | 8    | R        | Installing Tool      | A     |
| ATD 2040     | ASTRO  | 550402   | 22   | R        | Removal Tool         |       |
| ATD 2040-T   | ASTRO  | 550409   |      |          |                      |       |
| ATD 2044     | ASTRO  | 100442   |      |          |                      |       |
| ATD 2044-T   | ASTRO  | 100449   |      |          |                      |       |
| ATD 2047     | ASTRO  | 550472   |      |          |                      |       |
| ATD 2048     | ASTRO  | 550482   |      |          |                      |       |
| ATD 2048-T   | ASTRO  | 550489   |      |          |                      |       |
| ATD 2058     | ASTRO  | 100582   |      |          |                      |       |
| ATD 2058-T   | ASTRO  | 100589   |      |          |                      |       |
| ATD 2062     | ASTRO  | 550622   |      |          |                      |       |
| ATD 2090     | ASTRO  | 100902   |      |          |                      |       |
| ATD 2090-T   | ASTRO  | 100909   |      |          |                      |       |
| ATD 2094     | ASTRO  | 550942   |      |          |                      |       |
| ATD 2095     | ASTRO  | 550962   |      |          |                      |       |
| ATD 2095-T   | ASTRO  | 550969   |      |          |                      |       |
| ATD 2097     | ASTRO  | 550972   | 20   | F        | Removal Tool         | F     |
| ATD 2097-T   | ASTRO  | 550979   |      |          |                      |       |
| ATD 2127     | ASTRO  | 551272   | 16   | F        | Removal Tool         | F     |
| ATD 2127-T   | ASTRO  | 551279   |      |          |                      |       |
| ATD 2128     | ASTRO  | 551282   |      |          |                      |       |
| ATD 2128-T   | ASTRO  | 551289   |      |          |                      |       |
| ATD 2150     | ASTRO  | 101502   |      |          |                      |       |
| ATD 2150-T   | ASTRO  | 101509   |      |          |                      |       |
| ATD 2188     | ASTRO  | 551882   |      |          |                      |       |
| ATD 2188-T   | ASTRO  | 551889   |      |          |                      |       |
| ATD 2190     | ASTRO  | 551902   |      |          |                      |       |
| ATD 2190-T   | ASTRO  | 551909   |      |          |                      |       |
| ATD 2191     | ASTRO  | 551912   | 12   | F        | Removal Tool         | F     |
| ATD 2191-T   | ASTRO  | 551919   |      |          |                      |       |
| ATD 2250     | ASTRO  | 552502   | 8    | R        | Coax Removal Tool    | E     |
| ATD 2250-T   | ASTRO  | 552509   |      |          |                      |       |
| ATDL 2050    | ASTRO  | 110492   |      |          |                      |       |
| ATDL 2050-70 | ASTRO  | 110502   |      |          |                      |       |
| ATE 2057     | ASTRO  | 480572   | 20   | F        | Removal Tool         | H     |
| ATE 2057-T   | ASTRO  | 480579   |      |          |                      |       |
| ATF 1101     | ASTRO  | 101011   | 16   | R        | Size 16 Insert. Tool | AB    |
| ATF 1105     | ASTRO  | 111011   |      |          |                      |       |
| ATF 1105-T   | ASTRO  | 111018   |      |          |                      |       |
| ATF 1144     | ASTRO  | 101441   | 12   | R        | Size 12 Insert. Tool | AB    |
| ATF 1160     | ASTRO  | 111601   |      |          |                      |       |
| ATF 1256     | ASTRO  | 112561   |      |          |                      |       |
| ATF 1260     | ASTRO  | 102601   | 8    | R        | Size 8 Insert. Tool  | AB    |
| ATF 1359     | ASTRO  | 113591   |      |          |                      |       |
| ATF 1359-T   | ASTRO  | 113598   |      |          |                      |       |

| TOOL ID     | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION               | ILLUS |
|-------------|--------|----------|------|----------|---------------------------|-------|
| ATF 1378    | ASTRO  | 103781   | 4    | R        | Size 4 Insert. Tool       | AB    |
| ATF 1554    | ASTRO  | 115541   |      |          |                           |       |
| ATF 1554-T  | ASTRO  | 115548   |      |          |                           |       |
| ATF 1558    | ASTRO  | 105581   | 0    | R        | Size 0 Insert. Tool       | AB    |
| ATF 2115    | ASTRO  | 101152   | 16   | F        | Removal Tool Size 12      | E     |
| ATF 2115-T  | ASTRO  | 951159   |      |          |                           |       |
| ATF 2162    | ASTRO  | 101622   | 12   | F        | Removal Tool Size 8       | E     |
| ATF 2162-T  | ASTRO  | 101629   |      |          |                           |       |
| ATF 2252    | ASTRO  | 102522   | 8    | F        | Removal Tool Size 4       | E     |
| ATF 2252-T  | ASTRO  | 102529   |      |          |                           |       |
| ATF 2336    | ASTRO  | 103362   | 0    | F        | Removal Tool Size 0       | E     |
| ATF 2336-T  | ASTRO  | 953369   |      |          |                           |       |
| ATF 2518    | ASTRO  | 105182   | 0    | F        | Removal Tool              | E     |
| ATF 2518-T  | ASTRO  | 955189   |      |          |                           |       |
| ATG 2103    | ASTRO  | 901042   | 16   | F        | Removal                   | H     |
| ATG 2103-T  | ASTRO  | 901049   |      |          |                           |       |
| ATGH 1048   | ASTRO  | 820481   | 22   | R        | Installing & Rem.         |       |
| ATGH 1048-T | ASTRO  | 820488   |      |          |                           |       |
| ATGH 1050   | ASTRO  | 820501   | 22   | R        | Installing Tweezer        | J     |
| ATGH 1055   | ASTRO  | 820551   | 22   | R        | Installing Tool           |       |
| ATGH 1055-T | ASTRO  | 820558   |      |          |                           |       |
| ATGH 1070   | ASTRO  | 820701   | 20   | R        | Installing Tool           |       |
| ATGH 1070-T | ASTRO  | 820708   |      |          |                           |       |
| ATGH 1071   | ASTRO  | 820711   |      |          |                           |       |
| ATGH 1071-T | ASTRO  | 820718   |      |          |                           |       |
| ATGH 1076   | ASTRO  | 820761   | 20   | R        | Installing Tweezer        | J     |
| ATGH 1077   | ASTRO  | 820778   |      |          |                           |       |
| ATGH 1079   | ASTRO  | 820791   | 20   | R        | Installing Tool NAS 1599  |       |
| ATGH 1079-T | ASTRO  | 820798   |      |          |                           |       |
| ATGH 1081   | ASTRO  | 820811   | 20   | R        | Installing Tool           |       |
| ATGH 1081-T | ASTRO  | 820818   |      |          |                           |       |
| ATGH 1101   | ASTRO  | 821011   | 16   | R        | Installing Tweezer        | J     |
| ATGH 1104   | ASTRO  | 821041   | 16   | R        | Installing Tool           |       |
| ATGH 1104-T | ASTRO  | 821048   |      |          |                           |       |
| ATGH 1109   | ASTRO  | 821091   |      |          |                           |       |
| ATGH 1110   | ASTRO  | 821102   | 16   | R        | Removal Tweezer           | J-1   |
| ATGH 1112   | ASTRO  | 821121   | 16   | R        | Installing Tool NAS 1599  |       |
| ATGH 1112-T | ASTRO  | 821128   |      |          |                           |       |
| ATGH 1160   | ASTRO  | 821601   | 12   | R        | Installing Tool NAS 1599  | 1     |
| ATGH 1160-T | ASTRO  | 821608   |      |          |                           |       |
| ATGH 1190   | ASTRO  | 821901   | 8    | R        | Installing Tool NAS 1599  | 1     |
| ATGH 1190-T | ASTRO  | 821908   |      |          |                           |       |
| ATGH 2049   | ASTRO  | 820492   |      |          |                           |       |
| ATGH 2051   | ASTRO  | 820512   | 22D  | R        | Series IV Rem. Breech-lek | J-1   |
| ATGH 2052   | ASTRO  | 820502   | 22   | R        | Removal Tweezer           | J     |
| ATGH 2053   | ASTRO  | 820532   |      |          |                           |       |
| ATGH 2054   | ASTRO  | 820542   |      |          |                           |       |
| ATGH 2057   | ASTRO  | 820572   | 22   | R        | Removal Tool              |       |
| ATGH 2057-T | ASTRO  | 820579   |      |          |                           |       |

| TOOL ID     | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION               | ILLUS |
|-------------|--------|----------|------|----------|---------------------------|-------|
| ATGH 2060   | ASTRO  | 820602   |      |          |                           |       |
| ATGH 2074   | ASTRO  | 820742   |      |          |                           |       |
| ATGH 2075   | ASTRO  | 820752   |      |          |                           |       |
| ATGH 2076   | ASTRO  | 820762   | 20   | R        | Removal Tweezer           | J-1   |
| ATGH 2077   | ASTRO  | 820772   |      |          |                           |       |
| ATGH 2078   | ASTRO  | 820782   | 20   | R        | Series IV Rem. Breech-lek | J-1   |
| ATGH 2079   | ASTRO  | 820792   | 20   | R        | Removal Tool NAS 1599     |       |
| ATGH 2079-T | ASTRO  | 820799   |      |          |                           |       |
| ATGH 2080   | ASTRO  | 820802   |      |          |                           |       |
| ATGH 2081   | ASTRO  | 820812   | 20   | R        | Removal Tool              |       |
| ATGH 2081-T | ASTRO  | 820819   |      |          |                           |       |
| ATGH 2101   | ASTRO  | 821012   | 16   | R        | Removal Tweezer           | J     |
| ATGH 2103   | ASTRO  | 821032   |      |          |                           |       |
| ATGH 2104   | ASTRO  | 821042   |      |          |                           |       |
| ATGH 2105   | ASTRO  | 821052   | 16   | R        | Removal Tool              |       |
| ATGH 2105-T | ASTRO  | 821059   |      |          |                           |       |
| ATGH 2108   | ASTRO  | 821082   |      |          |                           |       |
| ATGH 2109   | ASTRO  | 821092   | 16   | R        | Series IV Rem. Breech-lek | J-1   |
| ATGH 2110   | ASTRO  | 821102   | 16   | R        | Removal Tweezer           | J-1   |
| ATGH 2111   | ASTRO  | 821112   |      |          |                           |       |
| ATGH 2160   | ASTRO  | 821602   |      |          |                           |       |
| ATGH 2330   | ASTRO  | 823302   | Coax | R        | Co-Ax Removal             |       |
| ATGH 2330-T | ASTRO  | 823309   |      |          |                           |       |
| ATGH 2366   | ASTRO  | 823662   |      |          |                           |       |
| ATGH 2531   | ASTRO  | 825312   |      |          |                           |       |
| ATH 1031    | ASTRO  | 950311   |      |          |                           |       |
| ATH 1031--T | ASTRO  | 950318   |      |          |                           |       |
| ATH 1033    | ASTRO  | 950331   |      |          |                           |       |
| ATH 1033-T  | ASTRO  | 950338   |      |          |                           |       |
| ATH 1046    | ASTRO  | 950451   |      |          |                           |       |
| ATH 1046-T  | ASTRO  | 950458   |      |          |                           |       |
| ATH 1050    | ASTRO  | 780501   | 22D  | R        | Installing Tweezer        | J-1   |
| ATH 1050-70 | ASTRO  | 780511   |      |          |                           |       |
| ATH 1052    | ASTRO  | 780521   | 22   | R        | Installing Tool           | A     |
| ATH 1052-T  | ASTRO  | 780528   |      |          |                           |       |
| ATH 1053    | ASTRO  | 780531   | 22D  | R        | Installing Tweezer        | J-1   |
| ATH 1054    | ASTRO  | 780541   |      |          |                           |       |
| ATH 1054-T  | ASTRO  | 780548   |      |          |                           |       |
| ATH 1067    | ASTRO  | 780661   | 20   | R        | Installing Tool           | A     |
| ATH 1067-T  | ASTRO  | 780668   |      |          |                           |       |
| ATH 1094    | ASTRO  | 110941   |      |          |                           |       |
| ATH 1094-T  | ASTRO  | 110948   |      |          |                           |       |
| ATH 1102    | ASTRO  | 781021   |      |          |                           |       |
| ATH 1102-T  | ASTRO  | 781028   |      |          |                           |       |
| ATH 1105    | ASTRO  | 781051   | 16   | R        | Installing Tool           | A     |
| ATH 2027    | ASTRO  | 780272   | 22   | F        | Jack Pin Rem. Tool        | H     |
| ATH 2027-T  | ASTRO  | 780279   |      |          |                           |       |
| ATH 2050    | ASTRO  | 780502   | 22D  | R        | Removal Tweezer           | J-1   |
| ATH 2052    | ASTRO  | 780522   | 22   | F        | Removal Tool              | H     |

| TOOL ID        | MANUFR | PICO No. | SIZE     | SERV FRM | DESCRIPTION         | ILLUS |
|----------------|--------|----------|----------|----------|---------------------|-------|
| ATH 2052       | ASTRO  | 780526   |          |          |                     |       |
| ATH 2052-T     | ASTRO  | 780529   |          |          |                     |       |
| ATH 2053       | ASTRO  | 780532   | 22D      | R        | Removal Tweezer     | J-1   |
| ATH 2088       | ASTRO  | 780882   | 20       | F        | Removal Tool        | E     |
| ATH 2088-T     | ASTRO  | 780889   |          |          |                     |       |
| ATH 2089       | ASTRO  | 780892   | 20       | F        | Removal Tool        | H     |
| ATH 2089-T     | ASTRO  | 780899   |          |          |                     |       |
| ATH 2102       | ASTRO  | 101042   | 16       | F        | Removal Tool        | H     |
| ATH 2102-T     | ASTRO  | 101049   |          |          |                     |       |
| ATH 2103       | ASTRO  | 781032   | 16       | F        | Removal Tool        | E     |
| ATH 2103-T     | ASTRO  | 781039   |          |          |                     |       |
| ATH 2120       | ASTRO  | 781202   |          |          |                     |       |
| ATH 2120-T     | ASTRO  | 781209   |          |          |                     |       |
| ATH 2121       | ASTRO  | 781212   | 16       | F        | Removal Tool        | E     |
| ATH 2121-T     | ASTRO  | 781219   |          |          |                     |       |
| ATH 2202       | ASTRO  | 402022   | 8        | F        | Coax. Rem. Tool     | E     |
| ATH 2202-T     | ASTRO  | 402029   |          |          |                     |       |
| ATH 2206       | ASTRO  | 782062   | 8        | F        | RG 195/U Coax       | E     |
| ATH 2206-T     | ASTRO  | 782069   |          |          |                     |       |
| ATH 2221       | ASTRO  | 782212   | 8        | F        | RG 180/U Coax       | E     |
| ATH 2221-T     | ASTRO  | 782219   |          |          |                     |       |
| ATH 3037-12    | ASTRO  | 780371   |          |          |                     |       |
| ATH 3037-18    | ASTRO  | 780381   |          |          |                     |       |
| ATH 3260       | ASTRO  | 782614   |          |          |                     |       |
| ATH 3261       | ASTRO  | 782824   |          |          |                     |       |
| ATH 3262       | ASTRO  | 782624   |          |          |                     |       |
| ATH 3263       | ASTRO  | 782634   |          |          |                     |       |
| ATIR 1610      | ASTRO  | 100482   | 22       | R        | Metal Tweezer       | J-1   |
| ATIR 1610-L    | ASTRO  | 110462   |          |          |                     |       |
| ATIR 1883      | ASTRO  | 100472   |          |          |                     |       |
| ATIR 1886      | ASTRO  | 110452   |          |          |                     |       |
| ATJ 2076       | ASTRO  | 950762   |          |          |                     |       |
| ATK 1130       | ASTRO  | 101203   |          |          |                     |       |
| ATK 2115       | ASTRO  | 101153   | 12-16-20 | R        | Unwired Removal Kit | R     |
| ATK 2120       | ASTRO  | 111203   |          |          |                     |       |
| ATL 1105-T     | ASTRO  | 761051   |          |          |                     |       |
| ATL 1112       | ASTRO  | 761121   |          |          |                     |       |
| ATL 1154       | ASTRO  | 761541   |          |          |                     |       |
| ATL 2040       | ASTRO  | 760402   |          |          |                     |       |
| ATL 2044       | ASTRO  | 760442   |          |          |                     |       |
| ATL 2062       | ASTRO  | 760622   |          |          |                     |       |
| ATL 2064       | ASTRO  | 760642   |          |          |                     |       |
| ATL 2095       | ASTRO  | 760952   |          |          |                     |       |
| ATL 2097       | ASTRO  | 760972   |          |          |                     |       |
| ATM 1046       | ASTRO  | 660461   | 22       | R        | Installing Tool     |       |
| ATM 1046-135   | ASTRO  | 660471   |          |          |                     |       |
| ATM 1046-135-T | ASTRO  | 660478   |          |          |                     |       |
| ATM 1046-T     | ASTRO  | 660468   |          |          |                     |       |
| ATM 1050       | ASTRO  | 660501   |          |          |                     |       |

| TOOL ID     | MANUFR | PICO No. | SIZE  | SERV FRM | DESCRIPTION             | ILLUS |
|-------------|--------|----------|-------|----------|-------------------------|-------|
| ATM 1050-T  | ASTRO  | 660508   |       |          |                         |       |
| ATM 2052    | ASTRO  | 660522   | 22    | F        | Removing Tool           | H     |
| ATM 2052-T  | ASTRO  | 660529   |       |          |                         |       |
| ATMD 2080   | ASTRO  | 880802   |       |          |                         |       |
| ATMD 2080-T | ASTRO  | 880809   |       |          |                         |       |
| ATML 0201B  | ASTRO  | 100511   | 22    | R        | Installs Pin & Sockets  | P     |
| ATML 0202B  | ASTRO  | 100791   |       |          |                         |       |
| ATML 0203B  | ASTRO  | 101041   | 16    | R        | Installs Pin & Sockets  | D     |
| ATML 0204B  | ASTRO  | 101581   | 12    | R        | Installs Pins & Sockets | D     |
| ATML 0301B  | ASTRO  | 100262   | 23    | F        | Socket Removal          | G     |
| ATML 0302B  | ASTRO  | 100382   | 20    | F        | Socket Removal          | G     |
| ATML 0303B  | ASTRO  | 100592   |       |          |                         |       |
| ATML 0304B  | ASTRO  | 100932   | 12    | F        | Socket Removal          | G     |
| ATML 0305B  | ASTRO  | 100302   | 23    | F        | Pin Removal             | C     |
| ATML 0306B  | ASTRO  | 100422   | 20    | F        | Pin Removal             | C     |
| ATML 0307B  | ASTRO  | 100652   | 16    | F        | Pin Removal             | C     |
| ATML 0308B  | ASTRO  | 101202   | 12    | F        | Pin Removal             | C     |
| ATML 0801B  | ASTRO  | 100501   | 22D/M | R        | Installing Tweezer      | J-1   |
| ATML 0802B  | ASTRO  | 100502   | 22D/M | R        | Removal Tweezer         | J-1   |
| ATML 0803B  | ASTRO  | 100601   | 22    | R        | Installing Tweezer      | J-1   |
| ATML 0804B  | ASTRO  | 100602   | 16    | F        | Socket Removal          | G     |
| ATML 0805B  | ASTRO  | 100781   | 20    | R        | Installing Tweezer      | J-1   |
| ATML 0806B  | ASTRO  | 100782   | 20    | F        | MS24256 Removal Tool    | E     |
| ATML 0807B  | ASTRO  | 101091   | 16    | R        | Installing Tweezer      | J-1   |
| ATML 0808B  | ASTRO  | 101092   | 16    | R        | Removal Tweezer         | J-1   |
| ATML 0809B  | ASTRO  | 101601   | 12    | R        | Installing Tweezer      | J-1   |
| ATML 0810B  | ASTRO  | 100602   | 16    | F        | Socket Removal          | G     |
| ATML 1201   | ASTRO  | 100492   | 22    | R        | Metal Tweezer           | J-2   |
| ATML 1202   | ASTRO  | 100482   | 22    | R        | Metal Tweezer           | J-1   |
| ATML 1501   | ASTRO  | 102812   | 8     | R        | Removal Pliers          | T     |
| ATML 1502   | ASTRO  | 104262   | 4     | R        | Removal Pliers          | T     |
| ATML 1503   | ASTRO  | 105652   | 0     | R        | Removal Pliers          | T     |
| ATML 1701   | ASTRO  | 101011   | 16    | R        | Size 16 Insert. Tool    | AB    |
| ATML 1702   | ASTRO  | 101441   | 12    | R        | Size 12 Insert. Tool    | AB    |
| ATML 1703   | ASTRO  | 100861   | 20    | R        | M524256 Insert. Tool    | C     |
| ATML 1704   | ASTRO  | 101001   | 16    | R        | MS24256 Insert. Tool    | C     |
| ATML 1705   | ASTRO  | 101451   | 12    | R        | MIL-C-16482 Inst. Tools | E     |
| ATML 1706   | ASTRO  | 102601   | 8     | R        | Size 8 Insert. Tool     | AB    |
| ATML 1707   | ASTRO  | 103781   | 4     | R        | Size 4 Insert. Tool     | AB    |
| ATML 1708   | ASTRO  | 105581   | 0     | R        | Size 0 Insert. Tool     | AB    |
| ATML 1801   | ASTRO  | 100941   | 16    | R        | Installing Tool         | A     |
| ATML 1802   | ASTRO  | 100551   |       |          |                         |       |
| ATML 1901   | ASTRO  | 101152   | 16    | F        | Removal Tool Size 12    | E     |
| ATML 1902   | ASTRO  | 101622   | 12    | F        | Removal Tool Size 8     | E     |
| ATML 1903   | ASTRO  | 102522   | 8     | F        | Removal Tool Size 4     | E     |
| ATML 1904   | ASTRO  | 103362   | 0     | F        | Removal Tool Size 0     | E     |
| ATML 1905   | ASTRO  | 105182   | 0     | F        | Removal Tool            | E     |
| ATML 1906   | ASTRO  | 400802   | 20    | F        | MIL-C-26636 Rem. Tool   | E     |
| ATML 1907   | ASTRO  | 100802   | 20    | F        | Removal Tool Size 16    | E     |

| TOOL ID        | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION              | ILLUS |
|----------------|--------|----------|------|----------|--------------------------|-------|
| ATML 1908      | ASTRO  | 101142   | 16   | F        | MS24256 Removal Tool     | E     |
| ATML 1909      | ASTRO  | 101612   | 12   | F        | Removal Tool             | E     |
| ATML 2001      | ASTRO  | 101042   | 16   | F        | Removal Tool             | H     |
| ATML 2002      | ASTRO  | 100612   | 22   | F        | Removal Tool             | H     |
| ATML 2701      | ASTRO  | 107532   |      |          |                          |       |
| ATML 2702      | ASTRO  | 106592   |      |          |                          |       |
| ATML 2703      | ASTRO  | 105212   |      |          |                          |       |
| ATML 2704      | ASTRO  | 104252   |      |          |                          |       |
| ATML 2705      | ASTRO  | 103392   |      |          |                          |       |
| ATML 2706      | ASTRO  | 103172   |      |          |                          |       |
| ATML 3001      | ASTRO  | 100442   |      |          |                          |       |
| ATML 3002      | ASTRO  | 100582   |      |          |                          |       |
| ATML 3003      | ASTRO  | 100902   |      |          |                          |       |
| ATML 3004      | ASTRO  | 101502   |      |          |                          |       |
| ATML 3005      | ASTRO  | 100722   |      |          |                          |       |
| ATML 3006      | ASTRO  | 101002   |      |          |                          |       |
| ATML 3007      | ASTRO  | 101472   |      |          |                          |       |
| ATML 3301      | ASTRO  | 100771   | 20   | R        | Installing Tool          | A     |
| ATML 3302      | ASTRO  | 100761   | 20   | R        | Size Sub Insert tool     | A     |
| ATML 3401      | ASTRO  | 100702   | 20   | F        | Size Sub 20 Removal tool | E     |
| ATMO 2080      | ASTRO  | 880802   |      |          |                          |       |
| ATMO 2080-T    | ASTRO  | 880809   |      |          |                          |       |
| ATMO 2081      | ASTRO  | 880812   | 20   | F        | RemovalTool              | E     |
| ATMO 2081-T    | ASTRO  | 880819   |      |          |                          |       |
| ATMO 2124      | ASTRO  | 881242   | 16   | F        | RemovalTool              | E     |
| ATMO 2124-T    | ASTRO  | 881249   |      |          |                          |       |
| ATMS 2050      | ASTRO  | 110512   |      |          |                          |       |
| ATMS 2062      | ASTRO  | 950622   |      |          |                          |       |
| ATMS 2062-T    | ASTRO  | 950629   |      |          |                          |       |
| ATMS 2073      | ASTRO  | 100722   |      |          |                          |       |
| ATMS 2073-T    | ASTRO  | 100729   |      |          |                          |       |
| ATMS 2101      | ASTRO  | 111032   | 16   | R        | Unwired Removal Tool     | R     |
| ATMS 2101-T    | ASTRO  | 101009   |      |          |                          |       |
| ATMS 2148      | ASTRO  | 101472   |      |          |                          |       |
| ATMS 2148-T    | ASTRO  | 101479   |      |          |                          |       |
| ATMS 90562-1   | ASTRO  | 107532   |      |          |                          |       |
| ATMS 90562-2   | ASTRO  | 106592   |      |          |                          |       |
| ATMS 90562-3   | ASTRO  | 105212   |      |          |                          |       |
| ATMS 90562-4   | ASTRO  | 104252   |      |          |                          |       |
| ATMS 90562-5   | ASTRO  | 103392   |      |          |                          |       |
| ATMS 90562-6   | ASTRO  | 103172   |      |          |                          |       |
| ATR 1078       | ASTRO  | 150781   |      |          |                          |       |
| ATR 1079       | ASTRO  | 150791   |      |          |                          |       |
| ATR 1080       | ASTRO  | 150801   | 20   | R        | Installing Tool          | A     |
| ATR 1080-135   | ASTRO  | 150821   |      |          |                          |       |
| ATR 1080-135-T | ASTRO  | 150828   |      |          |                          |       |
| ATR 1080-S     | ASTRO  | 150811   |      |          |                          |       |
| ATR 1080-S-T   | ASTRO  | 150818   |      |          |                          |       |
| ATR 1080-T     | ASTRO  | 150808   |      |          |                          |       |

| TOOL ID        | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION              | ILLUS |
|----------------|--------|----------|------|----------|--------------------------|-------|
| ATR 1081       | ASTRO  | 150831   |      |          |                          |       |
| ATR 1081-T     | ASTRO  | 150838   |      |          |                          |       |
| ATR 1105       | ASTRO  | 151051   |      |          |                          |       |
| ATR 1106       | ASTRO  | 151061   |      |          |                          |       |
| ATR 1107       | ASTRO  | 151071   | 16   | R        |                          | A     |
| ATR 1107-135   | ASTRO  | 151081   |      |          |                          |       |
| ATR 1107-135-T | ASTRO  | 151088   |      |          |                          |       |
| ATR 1107-T     | ASTRO  | 151078   |      |          |                          |       |
| ATR 1153       | ASTRO  | 151531   |      |          |                          |       |
| ATR 1157       | ASTRO  | 151571   |      |          |                          |       |
| ATR 1160       | ASTRO  | 151601   | 12   | R        | Installing Tool          | A     |
| ATR 1160-135   | ASTRO  | 151611   |      |          |                          |       |
| ATR 1160-135-T | ASTRO  | 151618   |      |          |                          |       |
| ATR 1160-S     | ASTRO  | 151621   |      |          |                          |       |
| ATR 1160-S-T   | ASTRO  | 151628   |      |          |                          |       |
| ATR 1160-T     | ASTRO  | 151608   |      |          |                          |       |
| ATR 2079       | ASTRO  | 150812   | 20   | R        | Removal Tweezer          | J-2   |
| ATR 2080       | ASTRO  | 150802   | 20   | R        | Removal Tweezer          | J-1   |
| ATR 2106       | ASTRO  | 151062   |      |          |                          |       |
| ATR 2109       | ASTRO  | 151092   |      |          |                          |       |
| ATR 2112       | ASTRO  | 151122   | 16   | R        | Removal Tweezer          | J-1   |
| ATR 2112-L     | ASTRO  | 151122   | 16   | R        | Removal Tweezer          | J-1   |
| ATR 2112-LS    | ASTRO  | 151122   | 16   | R        | Removal Tweezer          | J-1   |
| ATR 2157       | ASTRO  | 151572   |      |          |                          |       |
| ATR 2160       | ASTRO  | 151602   | 12   | R        | Removal Tweezer          | J-1   |
| ATR 2160-S     | ASTRO  | 151602   | 12   | R        | Removal Tweezer          | J-1   |
| ATS 1086       | ASTRO  | 880861   |      |          |                          |       |
| ATS 1086-T     | ASTRO  | 880868   |      |          |                          |       |
| ATS 1087       | ASTRO  | 880871   |      |          |                          |       |
| ATS 1087-T     | ASTRO  | 880878   |      |          |                          |       |
| ATS 2133       | ASTRO  | 881332   | 16   | R        | Removal Tool             | E     |
| ATS 2133-T     | ASTRO  | 881339   |      |          |                          |       |
| ATS 2234       | ASTRO  | 882342   |      |          |                          |       |
| ATS 2234-T     | ASTRO  | 882349   |      |          |                          |       |
| ATSE 1077      | ASTRO  | 100771   | 20   | R        | Installing Tool          | A     |
| ATSE 1077-T    | ASTRO  | 100778   |      |          |                          |       |
| ATSE 1078      | ASTRO  | 100761   | 20   | R        | Size Sub Insert tool     | A     |
| ATSE 1078-T    | ASTRO  | 100768   |      |          |                          |       |
| ATSE 1108      | ASTRO  | 801081   | 16   | R        | Installing Tool          | A     |
| ATSE 1108-T    | ASTRO  | 801088   |      |          |                          |       |
| ATSE 1158      | ASTRO  | 801581   | 12   | R        | InstallingTool           | A     |
| ATSE 1158-T    | ASTRO  | 801588   |      |          |                          |       |
| ATSE 2049      | ASTRO  | 800492   |      |          |                          |       |
| ATSE 2070      | ASTRO  | 100702   | 20   | F        | Size Sub 20 Removal tool | E     |
| ATSE 2070-T    | ASTRO  | 100709   |      |          |                          |       |
| ATSE 2071      | ASTRO  | 100702   | 20   | F        | Size Sub 20 Removal tool | E     |
| ATSE 2071-T    | ASTRO  | 100709   |      |          |                          |       |
| ATSE 2109      | ASTRO  | 801092   |      |          |                          |       |
| ATSE 2112      | ASTRO  | 801122   |      |          |                          |       |

| TOOL ID       | MANUFR | PICO No. | SIZE | SERV FRM | DESCRIPTION     | ILLUS |
|---------------|--------|----------|------|----------|-----------------|-------|
| ATSE 2166     | ASTRO  | 801662   |      |          |                 |       |
| ATT 1059      | ASTRO  | 860591   |      |          |                 |       |
| ATT 1059-T    | ASTRO  | 860598   |      |          |                 |       |
| ATT 1060 SGA  | ASTRO  | 860581   |      |          |                 |       |
| ATT 1060-B    | ASTRO  | 780601   |      |          |                 |       |
| ATT 1060-B-T  | ASTRO  | 860608   |      |          |                 |       |
| ATT 1060-S    | ASTRO  | 860591   |      |          |                 |       |
| ATT 1061      | ASTRO  | 860611   |      |          |                 |       |
| ATT 2059      | ASTRO  | 860582   |      |          |                 |       |
| ATT 2059-S    | ASTRO  | 860592   |      |          |                 |       |
| ATT 2060-S    | ASTRO  | 860602   |      |          |                 |       |
| ATUS 1050     | ASTRO  | 860501   |      |          |                 |       |
| ATUS 1050-T   | ASTRO  | 860508   |      |          |                 |       |
| ATUS 2052     | ASTRO  | 860512   |      |          |                 |       |
| ATUS 2052-T   | ASTRO  | 860519   |      |          |                 |       |
| ATV 1044      | ASTRO  | 860441   |      |          |                 |       |
| ATV 1044-T    | ASTRO  | 860448   |      |          |                 |       |
| ATV 1086      | ASTRO  | 860861   | 20   | R        | Installing tool | A     |
| ATV 2052      | ASTRO  | 860522   |      |          |                 |       |
| ATV 2052-T    | ASTRO  | 860529   |      |          |                 |       |
| ATV 2073      | ASTRO  | 860732   | 20   | F        | Removal Tool    | H     |
| ATV 2073-T    | ASTRO  | 860739   |      |          |                 |       |
| ATV 2075      | ASTRO  | 860752   |      |          |                 |       |
| ATV 2075-T    | ASTRO  | 860759   |      |          |                 |       |
| ATVP 1120-1   | ASTRO  | 841201   |      |          |                 |       |
| ATVP 1120-1-T | ASTRO  | 841208   |      |          |                 |       |
| ATVP 1120-2   | ASTRO  | 841361   |      |          |                 |       |
| ATVP 1120-2-T | ASTRO  | 841368   |      |          |                 |       |
| ATVP 1120-3   | ASTRO  | 840821   |      |          |                 |       |
| ATVP 1120-3-T | ASTRO  | 840828   |      |          |                 |       |
| ATVP 2101     | ASTRO  | 841012   |      |          |                 |       |
| ATVP 2101-T   | ASTRO  | 841019   |      |          |                 |       |
| ATW 1055      | ASTRO  | 880551   | 22   | R        | Installing Tool | A     |
| ATW 1055-T    | ASTRO  | 880558   |      |          |                 |       |
| ATW 2025      | ASTRO  | 880252   |      | F        | Removal Tool    | F     |
| ATW 2104      | ASTRO  | 881042   | 16   | F        | Removal Tool    | H     |
| ATW 2104-T    | ASTRO  | 881049   |      |          |                 |       |
| ATX 2001      | ASTRO  | 941565   |      |          |                 |       |
| ATX 2002      | ASTRO  | 941095   |      |          |                 |       |
| ATX 2003      | ASTRO  | 940775   |      |          |                 |       |
| ATX 2004      | ASTRO  | 940605   |      |          |                 |       |
| ATX 2005      | ASTRO  | 940515   |      |          |                 |       |
| ATX 2006      | ASTRO  | 941565   |      |          |                 |       |
| ATX 2007      | ASTRO  | 941095   |      |          |                 |       |
| ATX 2008      | ASTRO  | 940795   |      |          |                 |       |
| ATX 2009      | ASTRO  | 940475   |      |          |                 |       |
| ATX 2010      | ASTRO  | 940735   |      |          |                 |       |
| ATX 2011      | ASTRO  | 940535   |      |          |                 |       |
| ATX 2012      | ASTRO  | 940805   |      |          |                 |       |

| TOOL ID       | MANUFR | PICO No. | SIZE  | SERV FRM | DESCRIPTION                  | ILLUS |
|---------------|--------|----------|-------|----------|------------------------------|-------|
| ATX 2013      | ASTRO  | 940525   |       |          |                              |       |
| ATX 2014      | ASTRO  | 940515   |       |          |                              |       |
| AYBX 1055-S-T | ASTRO  | 320568   |       |          |                              |       |
| CET 12        | CANNON | 200922   | 12    | F        | Impact Removal Pin & Socket  | AE    |
| CET 12-2      | CANNON | 201052   | 12    | F        | Pin & Socket Removal Tool    | I     |
| CET 12-4      | CANNON | 151602   | 12    | R        | Removal Tweezer              | J-1   |
| CET 12-1A     | CANNON | 201052   | 12    | F        | Pin & Socket Removal Tool    | I     |
| CET 16        | CANNON | 200602   | 16    | F        | Impact Removal Pin & Socket  | AE    |
| CET 16-3A     | CANNON | 200702   | 16    | F        | Pin & Socket Push Out        | I     |
| CET 16-4      | CANNON | 200702   | 16    | F        | Pin & Socket Push Out        | I     |
| CET 16-9      | CANNON | 151122   | 16    | R        | Removal Tweezer              | J-1   |
| CET 16-KJ     | CANNON | 101092   | 16    | R        | Removal Tweezer              | J-1   |
| CET 20-1 1    | CANNON | 200712   | 20    | R        | Removal Tweezer              | J-1   |
| CET 20-14     | CANNON | 150802   | 20    | R        | Removal Tweezer              | J-1   |
| CET 20-3      | CANNON | 200412   | 20    | F        | Pin & Socket Push Out        | I     |
| CET 20-4      | CANNON | 200402   | 20    | F        | Pin & Socket Removal Tool    | I     |
| CET 20-8      | CANNON | 150802   | 20    | R        | Removal Tweezer              | J-1   |
| CET 20-A      | CANNON | 200472   | 20    | F        | Impact Removal Pin & Socket  | AE    |
| CET 20-D      | CANNON | 200712   | 20    | R        | Removal Tweezer              | J-1   |
| CET 20-D-1    | CANNON | 200732   | 20    | R        | Removal Tweezer              | J-1   |
| CET 20-SA     | CANNON | 200462   | 20    | F        | Pin & Socket Push Out        | I     |
| CET 22KJ      | CANNON | 100602   | 16    | F        | Socket Removal               | G     |
| CET 22M-KJ    | CANNON | 100502   | 22D/M | R        | Removal Tweezer              | J-1   |
| CET 22UW      | CANNON | 300545   | 22    | R        | Unwired Gontact Removal Tool | R     |
| CET 2OHD      | CANNON | 200762   | 20    | R        | Removal Tweezer              | J-1   |
| CET 2OKJ      | CANNON | 100782   | 20    | F        | MS24256 Removal Tool         | E     |
| CET 4         | CANNON | 202342   | 4     | F        | Pin & Socket Removal         | I     |
| CET 8         | CANNON | 201502   | 8     | F        | Pin & Socket Removal         | I     |
| CET 8-4       | CANNON | 102812   | 8     | R        | Removal Pliers               | T     |
| CET C4        | CANNON | 202002   | Coax  | F        | Pin & Socket Impact Removal  | AE    |
| CET C6B       | CANNON | 201882   | Coax  | F        | Pin & Socket Removal         | E     |
| CET Ci        | CANNON | 201702   |       | F        | Pin & Socket Impact Removal  | AE    |
| CET Cli       | CANNON | 202762   |       | F        | Pin & Socket Impact Removal  | E     |
| CET DPKB22    | CANNON | 200532   | 22    | R        | Removal Tweezer              | J-2   |
| CET FRF-0     | CANNON | 105182   | 0     | F        | Removal Tool                 | E     |
| CET FRF-12    | CANNON | 101622   | 12    | F        | Removal Tool Size 8          | E     |
| CET FRF-4     | CANNON | 103362   | 0     | F        | Removal Tool Size 0          | E     |
| CET FRF-8     | CANNON | 102552   | 8     | F        | Removal Tool                 | E     |
| CET KPSE2OA   | CANNON | 100802   | 20    | F        | Removal Tool Size 16         | E     |
| CET P-CTA     | CANNON | 200352   | 22    | F        | Removal Centi-Lok Pins       | A     |
| CET TF        | CANNON | 200262   |       | F        | Tuning Fork, Removal         | K     |
| CET VE-0      | CANNON | 105652   | 0     | R        | Removal Pliers               | T     |
| CET VE-12     | CANNON | 201842   | 12    | R        | Removal Tweezer              | J-1   |
| CET VE-16     | CANNON | 201362   | 16    | R        | Removal Tweezer              | J-1   |
| CET VE-4      | CANNON | 104262   | 4     | R        | Removal Pliers               | T     |
| CET VE-8      | CANNON | 102812   | 8     | R        | Removal Pliers               | T     |
| CETS-CTA      | CANNON | 200362   | 22    | F        | Removal Centi-Lok Socket     | A     |
| CFT FRF-16    | CANNON | 101152   | 16    | F        | Removal Tool Size 12         | E     |
| CIT 12        | CANNON | 201601   | 12    | R        | Installing Tool              | A     |

| TOOL ID       | MANUFR  | PICO No. | SIZE  | SERV FRM | DESCRIPTION                 | ILLUS |
|---------------|---------|----------|-------|----------|-----------------------------|-------|
| CIT 12-2      | CANNON  | 201601   | 12    | R        | Installing Tool             | A     |
| CIT 16 KJ     | CANNON  | 101091   | 16    | R        | Installing Tweezer          | J-1   |
| CIT 16-1      | CANNON  | 201111   | 16    | R        | InstallingTool              | A     |
| CIT 16-2      | CANNON  | 201131   | 16    | R        | Installing Tool             | A     |
| CIT 16-9      | CANNON  | 201121   | 16    | R        | Installing Tool             | A     |
| CIT 20        | CANNON  | 100861   | 20    | R        | M524256 Insert. Tool        | C     |
| CIT 20 KJ     | CANNON  | 100781   | 20    | R        | Installing Tweezer          | J-1   |
| CIT 20-13     | CANNON  | 200831   | 20    | R        | Installing Pliers           | M     |
| CIT 20-14     | CANNON  | 200821   | 20    | R        | Installing Pliers           | L     |
| CIT 20-2      | CANNON  | 200791   | 20    | R        | Installing Tool             | A     |
| CIT 20-SA     | CANNON  | 200841   | 20    | R        | Installing Tool             | A     |
| CIT 20A       | CANNON  | 200551   | 20    | R        | Installing Tool             | A     |
| CIT 22 KJ     | CANNON  | 100601   | 22    | R        | Installing Tweezer          | J-1   |
| CIT 22M-KJ    | CANNON  | 100501   | 22D/M | R        | Installing Tweezer          | J-1   |
| CIT 8         | CANNON  | 202651   | 8     | R        | Installing Tool             | A     |
| CIT C2        | CANNON  | 201871   | Coax  | F        | Coax DP*m Inst. Tool        | A     |
| CIT CTA-1     | CANNON  | 200461   | 22    | R        | Installing Tool             | J-1   |
| CIT DPKB      | CANNON  | 200531   | 22    | R        | Installing Tool             | A     |
| CIT DPX2MA22  | CANNON  | 200541   | 22    | R        | Installing Tool             | A     |
| CIT DPXMA22-1 | CANNON  | 200521   | 22    | R        | Installing Tool             | A     |
| CIT PSCTA22   | CANNON  | 200461   | 22    | R        | Installing Tool             | J-1   |
| CIT SS-10     | CANNON  | 201101   | 10    | R        | Installing Tool Sure-Seal   | A     |
| CIT SS-14     | CANNON  | 201051   | 20    | R        | Installing Tool Sure-Seal   | A     |
| CIT TF/FP     | CANNON  | 200321   |       | R        | Installing Tweezer          | J-2   |
| CIT12-1       | CANNON  | 201601   | 12    | R        | Installing Tool             | A     |
| CIT16         | CANNON  | 201111   | 16    | R        | InstallingTool              | A     |
| CIT20-18      | CANNON  | 200811   | 20    | R        | InstallingTool              | A     |
| CIT2OD        | CANNON  | 200721   | 20    | R        | InstallingTool              | A     |
| CIT4          | CANNON  | 203771   | 4     | R        | Installing Tool             | A     |
| DACK24        | DANIELS | 200402   | 20    | F        | Pin & Socket Removal Tool   | I     |
| DAK103        | DANIELS | 301331   | Coax  | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| DAK111-8      | DANIELS | 302531   | Coax  | R        | 10 PT-CE Coaxial Tool-Inst. | AB    |
| DAK118        | DANIELS | 501891   | Coax  | R        | No. 2 Shielded Contact      | D     |
| DAK12         | DANIELS | 101451   | 12    | R        | MIL-C-16482 Inst. Tools     | E     |
| DAK123        | DANIELS | 100941   | 16    | R        | Installing Tool             | A     |
| DAK126-12     | DANIELS | 101581   | 12    | R        | Installs Pins & Sockets     | D     |
| DAK126-16     | DANIELS | 101041   | 16    | R        | Installs Pin & Sockets      | D     |
| DAK126-20     | DANIELS | 100791   | 22D/M | I        | Metal Tweezer               |       |
| DAK126-22     | DANIELS | 100511   | 22    | R        | Installs Pin & Sockets      | P     |
| DAK133-16     | DANIELS | 781051   | 16    | R        | Installing Tool             | A     |
| DAK155-16     | DANIELS | 101011   | 16    | R        | Size 16 Insert. Tool        | AB    |
| DAK16         | DANIELS | 101001   | 16    | R        | MS24256 Insert. Tool        | C     |
| DAK20         | DANIELS | 100861   | 20    | R        | M524256 Insert. Tool        | C     |
| DAK55-0       | DANIELS | 105581   | 0     | R        | Size 0 Insert. Tool         | AB    |
| DAK55-12      | DANIELS | 101441   | 12    | R        | Size 12 Insert. Tool        | AB    |
| DAK55-22JA    | DANIELS | 100771   | 20    | R        | Installing Tool             | A     |
| DAK55-22SA    | DANIELS | 100761   | 20    | R        | Size Sub Insert tool        | A     |
| DAK55-4       | DANIELS | 103781   | 4     | R        | Size 4 Insert. Tool         | AB    |
| DAK55-8       | DANIELS | 102601   | 8     | R        | Size 8 Insert. Tool         | AB    |

| TOOL ID      | MANUFR  | PICO No. | SIZE     | SERV FRM | DESCRIPTION            | ILLUS |
|--------------|---------|----------|----------|----------|------------------------|-------|
| DAK83-12     | DANIELS | 151601   | 12       | R        | Installing Tool        | A     |
| DAK95-12     | DANIELS | 101601   | 12       | R        | Installing Tweezer     | J-1   |
| DAK95-16     | DANIELS | 101091   | 16       | R        | Installing Tweezer     | J-1   |
| DAK95-20     | DANIELS | 100781   | 20       | R        | Installing Tweezer     | J-1   |
| DAK95-22     | DANIELS | 100601   | 22       | R        | Installing Tweezer     | J-1   |
| DAK95-22M    | DANIELS | 100501   | 22D/M    | R        | Installing Tweezer     | J-1   |
| DAK96-12     | DANIELS | 301451   | 12       | R        | Installing Pliers      | AD    |
| DAK96-16     | DANIELS | 301281   | 16       | R        | Installing Pliers      | AD    |
| DRK105       | DANIELS | 121153   | 16       | R        | Removal Tool           |       |
| DRK105-12    | DANIELS | 121492   | 16       | R        | Removal Tip            |       |
| DRK105-12-1  | DANIELS | 121499   | 12       | R        | Removal Tool           |       |
| DRK105-16    | DANIELS | 121012   | 16/20    | I        | Installing Tool        |       |
| DRK105-16-1  | DANIELS | 121019   | 16       | I        | Installing Tool        |       |
| DRK105-20    | DANIELS | 120702   | 16       | R        | Removal Tool           |       |
| DRK105-20-1  | DANIELS | 120709   | 16       | R        | Removal Tip            |       |
| DRK105-22    | DANIELS | 120602   | 16       | I        | Installing Tool        |       |
| DRK105-22-1  | DANIELS | 120609   | 16       | I        | Installing Tool        |       |
| DRK105-22M   | DANIELS | 120492   | 16/20    | R        | Removal Tool           |       |
| DRK105-22M-1 | DANIELS | 120499   | 16       | I        | Metal Tweezer          |       |
| DRK105-HDL   | DANIELS | 120460   | 16       | R        | Metal Tweezer          |       |
| DRK110       | DANIELS | 101153   | 12-16-20 | R        | Unwired Removal Kit    | R     |
| DRK110-12-1  | DANIELS | 101479   | 16       | R        | Removal Tool           |       |
| DRK110-16    | DANIELS | 101002   | 16       | R        | Removal Tool           |       |
| DRK110-16-1  | DANIELS | 101009   | 12/16/20 | R        | Tool Kit               |       |
| DRK110-20-1  | DANIELS | 100729   | 12       | R        | Removal Tool           |       |
| DRK110-HDL   | DANIELS | 120620   | 12       | I        | Installing Tool        |       |
| DRK111-8     | DANIELS | 302912   | 8        | F        | Removal, Coaxial       | E     |
| DRK116       | DANIELS | 780522   | 22       | F        | Removal Tool           | H     |
| DRK119-8     | DANIELS | 502552   | Coax     | F        | No. 2 Shielded Contact | E     |
| DRK12        | DANIELS | 101612   | 12       | F        | Removal Tool           | E     |
| DRK120-20    | DANIELS | 400882   | 20       | F        | Rem. Tool              |       |
| DRK121-20    | DANIELS | 500852   | 20       | F        | Removal Tool           | E     |
| DRK122-16    | DANIELS | 501252   | 16       | F        | Removal Tool           | E     |
| DRK124       | DANIELS | 101042   | 16       | F        | Removal Tool           | H     |
| DRK124-22    | DANIELS | 100262   | 23       | F        | Socket Removal         | G     |
| DRK125-12    | DANIELS | 101202   | 12       | F        | Pin Removal            | C     |
| DRK125-16    | DANIELS | 100652   | 16       | F        | Pin Removal            | C     |
| DRK125-20    | DANIELS | 100422   | 20       | F        | Pin Removal            | C     |
| DRK125-23    | DANIELS | 100302   | 23       | F        | Pin Removal            | C     |
| DRK128       | DANIELS | 881042   | 16       | F        | Removal Tool           | H     |
| DRK129-12    | DANIELS | 100932   | 12       | F        | Socket Removal         | G     |
| DRK129-16    | DANIELS | 100592   | 4        | I        | Installing Tool        |       |
| DRK129-20    | DANIELS | 100382   | 20       | F        | Socket Removal         | G     |
| DRK129-23    | DANIELS | 100      | 0        | R        | Removal Tool           |       |
| DRK130-12    | DANIELS | 101502   | 0        | R        | Removal Tool           |       |
| DRK130-12-1  | DANIELS | 101509   | 1/0      | R        | Removal Tool           |       |
| DRK130-16    | DANIELS | 100902   | 0        | I        | Installing Tool        |       |
| DRK130-16-1  | DANIELS | 100909   | 2/0      | R        | Removal Tool           |       |
| DRK130-20    | DANIELS | 100582   | 4/0      | R        | Removal Tip            |       |

| TOOL ID     | MANUFR  | PICO No. | SIZE     | SERV FRM | DESCRIPTION                 | ILLUS |
|-------------|---------|----------|----------|----------|-----------------------------|-------|
| DRK130-20-1 | DANIELS | 100489   |          |          | Removal Tool                |       |
| DRK130-22   | DANIELS | 100492   | 22       | R        | Metal Tweezer               | J-2   |
| DRK130-22-1 | DANIELS | 100499   | 22D      | R        | Removal Tip                 |       |
| DRK131      | DANIELS | 501852   | 16       | F        | Removal Tool                | E     |
| DRK133-16   | DANIELS | 781212   | 16       | F        | Removal Tool                | E     |
| DRK134      | DANIELS | 101622   | 12       | F        | Removal Tool Size 8         | E     |
| DRK135      | DANIELS | 101152   | 16       | F        | Removal Tool Size 12        | E     |
| DRK136      | DANIELS | 202762   | 20       | F        | Pin & Socket Impact Removal | E     |
| DRK137      | DANIELS | 202002   | Coax     | F        | Pin & Socket Impact Removal | AE    |
| DRK140      | DANIELS | 300793   | 12/16/20 | F        | Removal Kit                 | N     |
| DRK142      | DANIELS | 940535   |          |          | Tool Kit-Unwired            |       |
| DRK151      | DANIELS | 200702   | 16       | F        | Pin & Socket Push Out       | I     |
| DRK152      | DANIELS | 201052   | 12       | F        | Pin & Socket Removal Tool   | I     |
| DRK16       | DANIELS | 101142   | 16       | F        | MS24256 Removal Tool        | E     |
| DRK166      | DANIELS | 502542   | Coax     | F        | Removal Tool                | E     |
| DRK169      | DANIELS | 550402   | 22       | R        | Removal Tool                | X     |
| DRK170      | DANIELS | 552542   | 8        | F        | Removal Tool                | E     |
| DRK171      | DANIELS | 780882   | 20       | F        | Removal Tool                | E     |
| DRK178-1    | DANIELS | 107532   | 20       | R        | Metal Tweezer               |       |
| DRK178-2    | DANIELS | 106592   | 16       | I        | Metal Tweezer               |       |
| DRK178-3    | DANIELS | 105212   | 12       | I        | Installing Tool             |       |
| DRK178-4    | DANIELS | 104252   | 12       | R        | Metal Tweezer               |       |
| DRK178-5    | DANIELS | 103392   | 20       | R        | Removal Tool                |       |
| DRK178-6    | DANIELS | 103172   | 20       | R        | Removal Tool                |       |
| DRK181      | DANIELS | 200402   | 20       | F        | Pin & Socket Removal Tool   | I     |
| DRK20       | DANIELS | 100802   | 20       | F        | Removal Tool Size 16        | E     |
| DRK25       | DANIELS | 200462   | 20       | F        | Pin & Socket Push Out       | I     |
| DRK27       | DANIELS | 780522   | 22       | F        | Removal Tool                | H     |
| DRK284      | DANIELS | 100602   | 16       | F        | Socket Removal              | G     |
| DRK287      | DANIELS | 100612   | 22       | F        | Removal Tool                | H     |
| DRK32       | DANIELS | 200702   | 16       | F        | Pin & Socket Push Out       | I     |
| DRK34       | DANIELS | 200922   | 12       | F        | Impact Removal Pin & Socket | AE    |
| DRK35       | DANIELS | 200602   | 16       | F        | Impact Removal Pin & Socket | AE    |
| DRK36       | DANIELS | 200472   | 20       | F        | Impact Removal Pin & Socket | AE    |
| DRK38       | DANIELS | 201882   | Coax     | F        | Pin & Socket Removal        | E     |
| DRK39       | DANIELS | 201702   | 22M      | F        | Pin & Socket Impact Removal | AE    |
| DRK50       | DANIELS | 121303   |          | R        | Tool Kit                    |       |
| DRK50-12    | DANIELS | 121442   | 22       | R        | Metal Tweezer-Straight      |       |
| DRK50-12-1  | DANIELS | 121449   | 8/12/16  |          | Tool Kit                    |       |
| DRK50-16    | DANIELS | 121162   | 20       | R        | Metal Tweezer               |       |
| DRK50-16-1  | DANIELS | 121169   |          | R        | Tool Kit                    |       |
| DRK51-12    | DANIELS | 551902   | 16       | R        | Metal Tweezer               |       |
| DRK51-12-4  | DANIELS | 551909   | 16       | I        | Metal Pliers                |       |
| DRK51-16    | DANIELS | 551272   | 16       | F        | Removal Tool                | F     |
| DRK51-16-4  | DANIELS | 551279   |          | R        | Tool Kit                    |       |
| DRK51-20    | DANIELS | 550972   | 20       | F        | Removal Tool                | F     |
| DRK51-20-4  | DANIELS | 550979   | 12,16    | R        | Tool Kit                    |       |
| DRK51-8     | DANIELS | 552502   | 8        | R        | Coax Removal Tool           | E     |
| DRK56-12    | DANIELS | 101622   | 12       | F        | Removal Tool Size 8         | E     |

| TOOL ID      | MANUFR  | PICO No. | SIZE    | SERV FRM | DESCRIPTION                            | ILLUS |
|--------------|---------|----------|---------|----------|--|-------|
| DRK56-16     | DANIELS | 101152   | 16      | F        | Removal Tool Size 12                   | E     |
| DRK56-22     | DANIELS | 100702   | 20      | F        | Size Sub 20 Removal tool               | E     |
| DRK56-4      | DANIELS | 103362   | 0       | F        | Removal Tool Size 0                    | E     |
| DRK56-4      | DANIELS | 105182   | 0       | F        | Removal Tool                           | E     |
| DRK56-8      | DANIELS | 102522   | 8       | F        | Removal Tool Size 4                    | E     |
| DRK57        | DANIELS | 301383   | 12-16   | F        | Removal Kit                            | N     |
| DRK57-12     | DANIELS | 301363   | 20      | R        | Removal Tool                           |       |
| DRK57-16     | DANIELS | 301373   | 16      |          | I & R Tool Kit                         |       |
| DRK58-8      | DANIELS | 402022   | 8       | F        | Coax. Rem. Tool                        | E     |
| DRK59        | DANIELS | 300723   | 8-12-16 | F        | Removal Kit                            | N     |
| DRK80        | DANIELS | 500933   | 8       | I        | Installing Tool                        |       |
| DRK81        | DANIELS | 300503   | 16/20   | F        | Removal Kit                            | N     |
| DRK82        | DANIELS | 500693   | 16      | F/R      | Insertion & Removal Kit                | P     |
| DRK83-12     | DANIELS | 151602   | 12      | R        | Removal Tweezer                        | J-1   |
| DRK83-16     | DANIELS | 151122   | 16      | R        | Removal Tweezer                        | J-1   |
| DRK83-20     | DANIELS | 150802   | 20      | R        | Removal Tweezer                        | J-1   |
| DRK84-20     | DANIELS | 100702   | 20      | F        | Size Sub 20 Removal tool               | E     |
| DRK840       | DANIELS | 105182   | 0       | F        | Removal Tool                           | E     |
| DRK87-8      | DANIELS | 402502   | 8       | F        | Rem. Tool                              | H     |
| DRK9         | DANIELS | 860402   | 20      | F        | Removal, Pins & Soc.                   | I     |
| DRK95-12     | DANIELS | 101612   | 12      | F        | Removal Tool                           | E     |
| DRK95-12-S   | DANIELS | 301602   | 12      | R        | Straight Removal Tweezer               | J-2   |
| DRK95-16     | DANIELS | 101092   | 16      | R        | Removal Tweezer                        | J-1   |
| DRK95-16-S   | DANIELS | 301092   | 16      | R        | Straight Removal Tweezer               | J-2   |
| DRK95-20     | DANIELS | 100782   | 20      | F        | MS24256 Removal Tool                   | E     |
| DRK95-20-S   | DANIELS | 300782   | 20      | R        | Straight Removal Tweezer               | J-2   |
| DRK95-22     | DANIELS | 100602   | 16      | F        | Socket Removal                         | G     |
| DRK95-22-S   | DANIELS | 300592   | 22      | R        | Straight Removal Tweezer               | J-2   |
| DRK95-22M    | DANIELS | 100502   | 22D/M   | R        | Removal Tweezer                        | J-1   |
| DRK95-22M-S  | DANIELS | 300502   | 22D/M   | R        | Straight Removal Tweezer               | J-2   |
| FW020 IT-000 | HUGHES  | 780661   | 20      | R        | Installing Tool                        | A     |
| HT2038       | MOLEX   | 881242   | 16      | F        | RemovalTool                            | E     |
| HT2285       | MOLEX   | 880812   | 20      | F        | RemovalTool                            | E     |
| J-1276-1     | BURNDY  | 400614   | 22      | R        | Installing Removal Tool YHMM-22-1 Pins |       |
| J-1276-3     | BURNDY  | 400614   | 22      | R        | Installing Removal Tool YHMM-22-1 Pins |       |
| J-1276-4     | BURNDY  | 400644   | 22      | R        | Installing Removal Tool YHMM-22-1 Pins |       |
| KM 20, I&E   | CANNON  | 200423   | 20      | F/R      | Installing & Removal Kit               | N     |
| M15513-12    | DEUTSCH | 101581   | 12      | R        | Installs Pins & Sockets                | D     |
| M15513-16    | DEUTSCH | 301071   | 16      | R        | Installing Tool                        | A     |
| M15513-20    | DEUTSCH | 550821   | 20      | R        | InstallingTool                         | A     |
| M15513-25    | DEUTSCH | 552061   | 8       | R        | Installing Tool                        | A     |
| M15514-12    | DEUTSCH | 101612   | 12      | F        | Removal Tool                           | E     |
| M15514-16    | DEUTSCH | 101142   | 16      | F        | MS24256 Removal Tool                   | E     |
| M15514-20    | DEUTSCH | 100802   | 20      | F        | Removal Tool Size 16                   | E     |
| M15514-25    | DEUTSCH | 552542   | 8       | F        | Removal Tool                           | E     |
| M15515-12    | DEUTSCH | 551912   | 12      | F        | Removal Tool                           | F     |
| M15515-16    | DEUTSCH | 551272   | 16      | F        | Removal Tool                           | F     |
| M15515-20    | DEUTSCH | 550972   | 20      | F        | Removal Tool                           | F     |
| M15515-22P5  | DEUTSCH | 550402   | 22      | R        | Removal Tool                           | X     |

| TOOL ID       | MANUFR          | PICO No. | SIZE     | SERV FRM | DESCRIPTION             | ILLUS |
|---------------|-----------------|----------|----------|----------|-------------------------|-------|
| M15515-25     | DEUTSCH         | 552502   | 8        | R        | Coax Removal Tool       | E     |
| M15571        | DEUTSCH         | 101153   | 12-16-20 | R        | Unwired Removal Kit     | R     |
| M15571-12     | DEUTSCH         | 111582   | 12       | R        | Unwired Removal Tool    | R     |
| M15571-16     | DEUTSCH         | 111032   | 16       | R        | Unwired Removal Tool    | R     |
| M15571-20     | DEUTSCH         | 110732   | 20       | R        | Unwired Removal Tool    | R     |
| PCD 91-021    | TRANSITION      | 810602   | 22       | R        | Removal Tool            | J-1   |
| PCD 91-023    | TRANSITION      | 810601   | 22       | R        | Installing Tool         | A     |
| RT 2260       | U.S. COMPONENTS | 100502   | 22D/M    | R        | Removal Tweezer         | J-1   |
| RTM 12-4      | BURNDY          | 101451   | 12       | R        | MIL-C-16482 Inst. Tools | E     |
| RTM 12-5      | BURNDY          | 101451   | 12       | R        | MIL-C-16482 Inst. Tools | E     |
| RTM 12-8      | BURNDY          | 101601   | 12       | R        | Installing Tweezer      | J-1   |
| RTM 12-8      | PLESSEY         | 101601   | 12       | R        | Installing Tweezer      | J-1   |
| RTM 16-2V     | BURNDY          | 101001   | 16       | R        | MS24256 Insert. Tool    | C     |
| RTM 16-4      | PLESSEY         | 101091   | 16       | R        | Installing Tweezer      | J-1   |
| RTM 20-17     | PLESSEY         | 100781   | 20       | R        | Installing Tweezer      | J-1   |
| RTM 20-5      | BURNDY          | 400671   | 20       | R        | Inst. Tool              | AZ    |
| RTM 20-5PI    | BURNDY          | 400709   | 20       | R        | Tip for RTM 20-5        | C     |
| RTM 22-1      | PLESSEY         | 100601   | 22       | R        | Installing Tweezer      | J-1   |
| RTM 24-3      | PLESSEY         | 100501   | 22D/M    | R        | Installing Tweezer      | J-1   |
| RX 12-7       | BURNDY          | 101612   | 12       | F        | Removal Tool            | E     |
| RX 16-7-2V    | BURNDY          | 401142   | 16       | F        | MIL-G-26636 Rem. Tool   | E     |
| RX 16-9       | PLESSEY         | 101092   | 16       | R        | Removal Tweezer         | J-1   |
| RX 8-1        | BURNDY          | 402022   | 8        | F        | Coax. Rem. Tool         | E     |
| RX 8-3        | BURNDY          | 402502   | 8        | F        | Rem. Tool               | H     |
| RX12-9        | PLESSEY         | 101602   | 12       | R        | Removal Tweezer         | J-1   |
| RX16-7-IV     | BURNDY          | 401142   | 16       | F        | MIL-G-26636 Rem. Tool   | E     |
| RX16-8        | BURNDY          | 401142   | 16       | F        | MIL-G-26636 Rem. Tool   | E     |
| RX22-1        | PLESSEY         | 100602   | 16       | F        | Socket Removal          | G     |
| RX24-3        | PLESSEY         | 100502   | 22D/M    | R        | Removal Tweezer         | J-1   |
| RX20-10       | BURNDY          | 400882   | 20       | F        | Rem. Tool               |       |
| RX20-24       | BURNDY          | 400802   | 20       | F        | MIL-C-26636 Rem. Tool   | E     |
| RX20-24-V-3   | BURNDY          | 400802   | 20       | F        | MIL-C-26636 Rem. Tool   | E     |
| RX20-24-V-5   | BURNDY          | 400802   | 20       | F        | MIL-C-26636 Rem. Tool   | E     |
| RX20-36       | PLESSEY         | 100782   | 20       | F        | MS24256 Removal Tool    | E     |
| T-06-1866-02  | ELCO            | 480572   | 20       | F        | Removal Tool            | H     |
| T1 0149-0     | SAE             | 105652   | 0        | R        | Removal Pliers          | T     |
| T10149-12     | SAE             | 151602   | 12       | R        | Removal Tweezer         | J-1   |
| T10149-16     | SAE             | 151122   | 16       | R        | Removal Tweezer         | J-1   |
| T10149-4      | SAE             | 104262   | 4        | R        | Removal Pliers          | T     |
| T10149-8      | SAE             | 102812   | 8        | R        | Removal Pliers          | T     |
| T10150-0      | SAE             | 105581   | 0        | R        | Size 0 Insert. Tool     | AB    |
| T10150-12     | SAE             | 801581   | 12       | R        | Installing Tool         | A     |
| T10150-4      | SAE             | 103781   | 4        | R        | Size 4 Insert. Tool     | AB    |
| T10150-8      | SAE             | 102601   | 8        | R        | Size 8 Insert. Tool     | AB    |
| T10150-16     | SAE             | 801081   | 16       | R        | Installing Tool         | A     |
| TD-020-IT-000 | HUGHES          | 780661   | 20       | R        | Installing Tool         | A     |
| TE-022RT-001  | HUGHES          | 780272   | 22       | F        | Jack Pin Rem. Tool      | H     |
| TG 221T       | HUGHES          | 780531   | 22D      | R        | Installing Tweezer      | J-1   |
| TG 22RT       | HUGHES          | 780532   | 22D      | R        | Removal Tweezer         | J-1   |

| TOOL ID       | MANUFR  | PICO No. | SIZE  | SERV FRM | DESCRIPTION              | ILLUS |
|---------------|---------|----------|-------|----------|--------------------------|-------|
| TGT2O ITO     | HUGHES  | 100761   | 20    | R        | Size Sub Insert tool     | A     |
| TGT2OITI      | HUGHES  | 100771   | 20    | R        | Installing Tool          | A     |
| TGT2ORT       | HUGHES  | 100702   | 20    | F        | Size Sub 20 Removal tool | E     |
| THM 22B000    | HUGHES  | 100502   | 22D/M | R        | Removal Tweezer          | J-1   |
| TIR 1610      | AIRBORN | 100482   | 22    | R        | Metal Tweezer            | J-1   |
| TMO16IT-001   | HUGHES  | 100941   | 16    | R        | Installing Tool          | A     |
| TMO16IT-003   | HUGHES  | 100941   | 16    | R        | Installing Tool          | A     |
| TMO16RT-001   | HUGHES  | 101022   | 16    | F        | Removal Tool             | H     |
| TMO16RT-006   | HUGHES  | 781032   | 16    | F        | Removal Tool             | E     |
| TR 1883       | AIRBORN | 100492   | 22    | R        | Metal Tweezer            | J-2   |
| TR 1886       | AIRBORN | 890472   | 22    | R        | Metal Tweezer            | J-2   |
| TR22DIT       | HUGHES  | 780501   | 22D   | R        | Installing Tweezer       | J-1   |
| TR22DRT       | HUGHES  | 780502   | 22D   | R        | Removal Tweezer          | J-1   |
| TU18ORT-000   | HUGHES  | 782212   | 8     | F        | RG 180/U Coax            | E     |
| TU19SRT-000   | HUGHES  | 782062   | 8     | F        | RG 195/U Coax            | E     |
| TUO16IT-002   | HUGHES  | 781051   | 16    | R        | Installing Tool          | A     |
| TUO16RT-000   | HUGHES  | 781212   | 16    | F        | Removal Tool             | E     |
| TUO16RT-006   | HUGHES  | 781212   | 16    | F        | Removal Tool             | E     |
| TUO2OIT-002   | HUGHES  | 780671   | 20    | R        | Installing Tool          | A     |
| TUO2ORT-002   | HUGHES  | 780892   | 20    | F        | Removal Tool             | H     |
| TUO2ORT-006   | HUGHES  | 780882   | 20    | F        | Removal Tool             | E     |
| TW 020 RT-002 | HUGHES  | 780882   | 20    | F        | Removal Tool             | E     |
| TW 020 RT-006 | HUGHES  | 780882   | 20    | F        | Removal Tool             | E     |
| TW 022 IT-007 | HUGHES  | 780521   | 22    | R        | Installing Tool          | A     |
| TW 022 IT-OCi | HUGHES  | 780521   | 22    | R        | Installing Tool          | A     |
| TW 022 RT-001 | HUGHES  | 780512   | 22    | F        | Removal Tool             | H     |
| TW 022 RT-006 | HUGHES  | 780522   | 22    | F        | Removal Tool             | H     |



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# ***MIL-STD***

## ***Cross Reference***

**MS TO M81969**

| MS NO.        | M81969 NO.   | PLASTIC | METAL EQUIV<br>INST | REM      | SIZE | DESCRIPTION                     |
|---------------|--------------|---------|---------------------|----------|------|---------------------------------|
| MS17805       | M81969/18-01 |         | 100941              |          |      |                                 |
| MS17806       | M81969/20-01 |         |                     | 101042   | 8    | MIL-C-24308 Connector Series    |
| MS17806       | M81969/20-02 |         |                     | 100612   | 12   | Metal Tool (MS24256R12)         |
| MS24256A-12   | M81969/17-05 |         | 101451              |          |      |                                 |
| MS24256A20    | M81969/17-03 |         | 100861              |          | 20   | Metal Tool                      |
| MS24256R12    | M81969/19-09 |         |                     | 101612   | 12   | Metal Tool (MS24256R12)         |
| MS24256R16    | M81969/19-08 |         |                     | 101142   | 16   | Metal Tool (MS24256R16)         |
| MS24256R20    | M81969/19-07 |         |                     | 100802   | 20   | Metal Tool (MS24256R20)         |
| MS24256RH16   | M81969/19-11 |         |                     | NO       |      |                                 |
| MS24256RH20   | M81969/19-10 |         |                     | NO       |      |                                 |
| MS24308/18-1  | M81969/1-04  | 100573  |                     |          |      | Plastic Equiv                   |
| MS24308/18-2  | M81969/1-03  | 101123  | 151071              | 151122   | 16   | Joggled Tool                    |
| MS27495A12    | M81969/8-09  |         | 101601              |          | 12   | Metal Tweezer-Direct Equivalent |
| MS27495A16    | M81969/8-07  |         | 101091              |          | 16   | Metal Tweezer-Direct Equivalent |
| MS27495A20    | M81969/8-05  |         | 100781              |          | 20   | Metal Tweezer-Direct Equivalent |
| MS27495A22    | M81969/8-03  |         | 100601              |          | 20   | Metal Tweezer-Direct Equivalent |
| MS27495A22M   | M81969/8-01  |         | 100501              | 100502   | 22D  | Metal Tweezer                   |
| MS27495R12    | M81969/8-10  |         |                     | 100602   | 22   | Metal Tweezer                   |
| MS27495R16    | M81969/8-08  |         | POSSIBLE            | 101092   | 16   | Metal Tweezer                   |
| MS27495R20    | M81969/8-06  |         |                     | 100782   | 20   | Metal Tweezer                   |
| MS27495R22    | M81969/8-04  |         |                     | 100602   | 22   | Metal Tweezer                   |
| MS27495R22M   | M81969/8-02  |         | POSSIBLE            | 100502   |      |                                 |
| MS30160-12    | M81969/16-03 | 101463  | 551541              | 551542   |      |                                 |
| MS30160-16    | M81969/16-02 | 100883  | 101091              | 550942   | 16   | Metal Tool                      |
| MS30160-20    | M81969/16-01 | 100583  | 101601              | 550612   | 20   | Metal Tool                      |
| MS30160-22    | M81969/16-04 | 100483  | 100601              | 550522   |      |                                 |
| MS3156-20     | M81969/1-02  | 100723  | 200711              | 200712   | 20   | Metal Functional Equivalent     |
| MS3156-22     | M81969/1-01  | 100533  | 200541              | 200532   | 22   | Metal Functional Equivalent     |
| MS3159-12     | M81969/30-04 |         |                     | 101502   | 12   | Metal Tool                      |
| MS3159-16     | M81969/30-03 |         |                     | 100902   | 16   | Metal Tool                      |
| MS3159-20     | M81969/30-02 |         |                     | 100582   | 20   | Metal Tool                      |
| MS3159-22     | M81969/30-01 |         | 102601              | 100442   | 22   | Metal Tool                      |
| MS3165-16 & 8 | M81969/29-01 |         | 101011              |          | 16   |                                 |
| MS3165-32-00  | M81969/29-04 |         | 105581              | 105652   | 0    | Metal Pliers-MIL-C-5015         |
| MS3165-32-04  | M81969/29-03 |         | 103781              | 104262   | 4    | Metal Pliers-MIL-C-5015         |
| MS3165-32-08  | M81969/29-02 | 102712  | 101001              | 102812   | 8    | Metal Pliers-MIL-C-5015         |
| MS3178-001    | M81969/28-01 |         | POSSIBLE            | POSSIBLE |      |                                 |
| MS3178-002    | M81969/28-02 |         | 101441              | POSSIBLE |      |                                 |
| MS3323-12     | M81969/2-04  |         | 101581              |          | 12   | Pins & Sockets                  |
| MS3323-16     | M81969/2-03  |         | 101041              |          | 16   | Pins & Sockets                  |
| MS3323-20     | M81969/2-02  |         | 100791              |          | 20   | Pins & Sockets                  |
| MS3323-22     | M81969/2-01  |         | 100511              |          | 22   | Pins & Sockets                  |
| MS3342-12     | M81969/3-08  |         |                     | 101202   | 12   | Pins Only                       |
| MS3342-16     | M81969/3-07  |         |                     | 100652   | 16   | Pins Only                       |
| MS3342-20     | M81969/3-06  |         |                     | 100422   | 20   | MIL-C-81511 Series 1 & 2 Pins   |
| MS3342-23     | M81969/3-05  |         |                     | 100302   | 23   | Pins Only                       |
| MS3344-12     | M81969/3-04  |         |                     | 100932   | 12   | Sockets Only                    |
| MS3344-16     | M81969/3-03  |         |                     | 100592   | 16   | Sockets Only                    |
| MS3344-20     | M81969/3-02  |         |                     | 100382   | 20   | Sockets Only                    |

**M81969 TO MS**

| M81969       | MS #           | PLASTIC | METAL EQUIV<br>INST | REM    | SIZE | DESCRIPTION                     |
|--------------|----------------|---------|---------------------|--------|------|---------------------------------|
| M81969/1-01  | MS3156-22      | 100533  | 200541              | 200532 | 22   | Metal Functional Equivilent     |
| M81969/1-02  | MS3156-20      | 100723  | 200711              | 200712 | 20   | Metal Functional Equivilent     |
| M81969/1-03  | MS24308/18-2   | 101123  | 151071              | 151122 | 16   | Joggled Tool                    |
| M81969/1-04  | MS24308/18-1   | 100573  |                     |        |      | Plastic Equiv                   |
| M81969/2-01  | MS3323-22      |         | 100511              |        | 22   | Pins & Sockets                  |
| M81969/2-02  | MS3323-20      |         | 100791              |        | 20   | Pins & Sockets                  |
| M81969/2-03  | MS3323-16      |         | 101041              |        | 16   | Pins & Sockets                  |
| M81969/2-04  | MS3323-12      |         | 101581              |        | 12   | Pins & Sockets                  |
| M81969/3-01  | MS3344-23      |         |                     | 100262 | 23   | Sockets Only                    |
| M81969/3-02  | MS3344-20      |         |                     | 100382 | 20   | Sockets Only                    |
| M81969/3-03  | MS3344-16      |         |                     | 100592 | 16   | Sockets Only                    |
| M81969/3-04  | MS3344-12      |         |                     | 100932 | 12   | Sockets Only                    |
| M81969/3-05  | MS3342-23      |         |                     | 100302 | 23   | Pins Only                       |
| M81969/3-06  | MS3342-20      |         |                     | 100422 | 20   | MIL-C-81511 Series 1 & 2 Pins   |
| M81969/3-07  | MS3342-16      |         |                     | 100652 | 16   | Pins Only                       |
| M81969/3-08  | MS3342-12      |         |                     | 101202 | 12   | Pins Only                       |
| M81969/5-01  |                |         | POSSIBLE            |        |      |                                 |
| M81969/8-01  | MS27495A22M    |         | 100501              | 100502 | 22D  | Metal Tweezer                   |
| M81969/8-02  | MS27495R22M    |         | POSSIBLE            | 100502 |      |                                 |
| M81969/8-03  | MS27495A22     |         | 100601              |        | 20   | Metal Tweezer-Direct Equivilent |
| M81969/8-04  | MS27495R22     |         |                     | 100602 | 22   | Metal Tweezer                   |
| M81969/8-05  | MS27495A20     |         | 100781              |        | 20   | Metal Tweezer-Direct Equivilent |
| M81969/8-06  | MS27495R20     |         |                     | 100782 | 20   | Metal Tweezer                   |
| M81969/8-07  | MS27495A16     |         | 101091              |        | 16   | Metal Tweezer-Direct Equivilent |
| M81969/8-08  | MS27495R16     |         | POSSIBLE            | 101092 | 16   | Metal Tweezer                   |
| M81969/8-09  | MS27495A12     |         | 101601              |        | 12   | Metal Tweezer-Direct Equivilent |
| M81969/8-10  | MS27495R12     |         |                     | 100602 | 22   | Metal Tweezer                   |
| M81969/10    |                |         | NO                  |        |      |                                 |
| M81969/14-01 |                | 100503  |                     |        |      | Plastic Equiv                   |
| M81969/14-02 |                | 100803  |                     |        |      | Plastic Equiv                   |
| M81969/14-03 |                | 101033  |                     |        |      | Plastic Equiv                   |
| M81969/14-04 |                | 101553  |                     |        |      | Plastic Equiv                   |
| M81969/14-05 |                | 102103  |                     |        |      | Plastic Equiv                   |
| M81969/14-06 |                | 102772  |                     |        |      | Plastic Equiv                   |
| M81969/14-07 |                | 103092  |                     |        |      | Plastic Equiv                   |
| M81969/14-08 |                | 105652  |                     |        |      | Plastic Equiv                   |
| M81969/14-09 |                | 100603  |                     |        |      | Plastic Equiv                   |
| M81969/14-10 |                | 100683  |                     |        |      | Plastic Equiv                   |
| M81969/14-11 |                | 100803  |                     |        |      | Plastic Equiv                   |
| M81969/14-12 |                | 102782  |                     |        |      | Plastic Equiv                   |
| M81969/15-01 | MS3483-1       |         | NO                  | 102812 | 8    | Metal Pliers-MIL-C-5015         |
| M81969/15-02 | MS3483-2       |         |                     | 104262 | 4    | Metal Pliers-MIL-C-5015         |
| M81969/15-03 | MS3483-3       |         | 151071              | 105652 |      | Metal Pliers-MIL-C-5015         |
| M81969/16-01 | MS30160-20     | 100583  | 101601              | 550612 | 20   | Metal Tool                      |
| M81969/16-02 | MS30160-16     | 100883  | 101091              | 550942 | 16   | Metal Tool                      |
| M81969/16-03 | MS30160-12     | 101463  | 551541              | 551542 |      |                                 |
| M81969/16-04 | MS30160-22     | 100483  | 100601              | 550522 |      |                                 |
| M81969/17-01 | MS90455-16 & 1 |         | 101011              |        | 16   | Metal Tool                      |
| M81969/17-02 | MS90455-12 & 2 |         | 101441              |        | 12   | Metal Tool                      |

**M81969 TO MS**

| M81969 NO.   | MS NO.         | PLASTIC | METAL EQUIV<br>INST | REM      | SIZE   | DESCRIPTION                         |
|--------------|----------------|---------|---------------------|----------|--------|-------------------------------------|
| M81969/17-03 | MS24256A20     |         | 100861              |          | 20     | Metal Tool                          |
| M81969/17-04 | MS90455-2      |         | 101001              |          | 16     | Metal Tool                          |
| M81969/17-05 | MS24256A-12    |         | 101451              |          |        |                                     |
| M81969/17-06 | MS90455-8 &-3  |         | 102601              |          | 8      | Metal Tool                          |
| M81969/17-07 | MS90455-4      |         | 103781              |          | 4      | Metal Tool                          |
| M81969/17-08 | MS90455-5 & 0  |         | 105581              |          | 0      | Metal Tool                          |
| M81969/18-01 | MS17805        |         | 100941              |          |        |                                     |
| M81969/18-02 |                |         | 100551              |          |        |                                     |
| M81969/19-01 | MS90456-1 & 16 |         | 200711              | 101152   | 16     | MIL-C-5015                          |
| M81969/19-02 | MS90456-2 & 12 |         | 200541              |          | 12     | MIL-C-5015                          |
| M81969/19-03 | MS90456-3 &8   |         |                     | 102522   | 8      | MIL-C-5015                          |
| M81969/19-04 | MS90456-4      |         |                     | 103362   | 4      | MIL-C-5015                          |
| M81969/19-05 | MS90456-5 & 0  |         |                     | 105182   | 0      | MIL-C-5015                          |
| M81969/19-06 | MS90456R20     |         |                     | 400802   | 20     | “MIL-C-26482 (MS24256R-20, REV. E)” |
| M81969/19-07 | MS24256R20     |         |                     | 100802   | 20     | Metal Tool (MS24256R20)             |
| M81969/19-08 | MS24256R16     |         |                     | 101142   | 16     | Metal Tool (MS24256R16)             |
| M81969/19-09 | MS24256R12     |         |                     | 101612   | 12     | Metal Tool (MS24256R12)             |
| M81969/19-10 | MS24256RH20    |         |                     | NO       |        |                                     |
| M81969/19-11 | MS24256RH16    |         |                     | NO       |        |                                     |
| M81969/20-01 | MS17806        |         |                     | 101042   | 8      | MIL-C-24308 Connector Series        |
| M81969/20-02 | MS17806        |         |                     | 100612   | 12     | Metal Tool (MS24256R12)             |
| M81969/21    |                |         | NO                  |          |        |                                     |
| M81969/22    |                |         | POSSIBLE            |          |        |                                     |
| M81969/23    |                |         | POSSIBLE            |          |        |                                     |
| M81969/24    |                |         | NO                  |          |        |                                     |
| M81969/25-01 |                |         | POSSIBLE            |          |        |                                     |
| M81969/25-02 |                |         | POSSIBLE            |          |        |                                     |
| M81969/25-03 |                |         | POSSIBLE            |          |        |                                     |
| M81969/25-04 |                |         | POSSIBLE            |          |        |                                     |
| M81969/25-05 |                |         | POSSIBLE            |          |        |                                     |
| M81969/25-06 |                |         | POSSIBLE            |          |        |                                     |
| M81969/26    |                |         | NO                  |          |        |                                     |
| M81969/27-01 | MS90562-1      |         |                     | 107532   | Apr-00 | “MIL_C_22992, Class L Connector”    |
| M81969/27-02 | MS90562-2      |         |                     | 106592   | Feb-00 | “MS90566, MS90559 & MS90560”        |
| M81969/27-03 | MS90562-3      |         |                     | 105212   | Jan-00 | “MS90566, MS90559 & MS90560”        |
| M81969/27-04 | MS90562-4      |         |                     | 104252   | 2      | “MS90566, MS90559 & MS90560”        |
| M81969/27-05 | MS90562-5      |         | POSSIBLE            | 103392   | 4      | “MS90566, MS90559 & MS90560”        |
| M81969/27-06 | MS90562-6      |         | POSSIBLE            | 103172   | 6      | “MS90566, MS90559 & MS90560”        |
| M81969/28-01 | MS3178-001     |         | POSSIBLE            | POSSIBLE |        |                                     |
| M81969/28-02 | MS3178-002     |         | 101441              | POSSIBLE |        |                                     |
| M81969/29-01 | MS3165-16 & 8  |         | 101011              |          | 16     |                                     |
| M81969/29-02 | MS3165-32-08   | 102712  | 101001              | 102812   | 8      | Metal Pliers-MIL-C-5015             |

**M81969 TO MS**

| M81969       | MS #         | PLASTIC | METAL EQUIV<br>INST | REM    | SIZE | DESCRIPTION             |
|--------------|--------------|---------|---------------------|--------|------|-------------------------|
| M81969/29-03 | MS3165-32-04 |         | 103781              | 104262 | 4    | Metal Pliers-MIL-C-5015 |
| M81969/29-04 | MS3165-32-00 |         | 105581              | 105652 | 0    | Metal Pliers-MIL-C-5015 |
| M81969/30-01 | MS3159-22    |         | 102601              | 100442 | 22   | Metal Tool              |
| M81969/30-02 | MS3159-20    |         |                     | 100582 | 20   | Metal Tool              |
| M81969/30-03 | MS3159-16    |         |                     | 100902 | 16   | Metal Tool              |
| M81969/30-04 | MS3159-12    |         |                     | 101502 | 12   | Metal Tool              |
| M81969/30-05 | MS3448-001A  |         |                     | 100722 | 20   | Single Tip Tool         |
| M81969/30-06 | MS3448-001B  |         |                     | 101002 | 16   | Tip only-Delrin         |
| M81969/30-07 | MS3448-001C  |         |                     | 101472 | 12   | Single Tip Tool         |
| M81969/31    |              |         | NO                  |        |      |                         |
| M81969/32    |              |         | NO                  |        |      |                         |
| M81969/33-01 |              |         | 100771              |        | 20   | MIL-C-28840             |
| M81969/33-02 |              |         | 100761              |        | 20   | MIL-C-28840             |
| M81969/34    |              |         | 100702              |        | 20   | MIL-C-28840             |
| M81969/39-01 |              | 100693  |                     |        |      | Plastic Equiv           |



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# *Plastic Tools Cross Reference*

## PLASTIC TOOLS

| Contact No. | Company  | M81969       | Plastic No | Size | Metal Equiv<br>Instal | Rem    | Description                 |
|-------------|----------|--------------|------------|------|-----------------------|--------|-----------------------------|
| 10-29640-20 | BENDIX   | M81969/08-05 |            | 20   | 100781                |        |                             |
| 10-29640-22 | BENDIX   | M81969/08-03 |            | 22   | 100601                |        |                             |
| 10-29640-23 | BENDIX   | M81969/08-01 |            | 23   | 100501                |        |                             |
| 10-29643-20 | BENDIX   | M81969/08-06 |            | 20   | 100782                |        |                             |
| 10-29643-22 | BENDIX   | M81969/08-04 |            | 22   | 100602                |        |                             |
| 10-29643-23 | BENDIX   | M81969/08-02 |            | 23   | 100502                |        |                             |
| 1664-12     | NAS      | M81969/14-04 | 101553     | 12   | 151601                | 151602 | Plastic Equiv               |
| 1664-16     | NAS      | M81969/14-03 | 101033     | 16   | 151071                | 151122 | Plastic Equiv               |
| 1664-20     | NAS      | M81969/14-02 | 100803     | 20   | 150801                | 150802 | Plastic Equiv               |
| 294-108     | AMPHENOL | M81969/14-02 | 100803     | 20   | 150801                | 150802 | Plastic Equiv               |
| 294-110     | AMPHENOL | M81969/14-04 | 101553     | 12   | 151601                | 151602 | Plastic Equiv               |
| 294-190     | AMPHENOL | M81969/14-03 | 101033     | 16   | 151071                | 151122 | Plastic Equiv               |
| 294-540     | AMPHENOL | M81969/14-03 | 101033     | 16   | 301081                | 101092 | Plastic Equiv               |
| 294-541     | AMPHENOL | M81969/14-01 | 100503     | 22D  | 300491                | 100502 | Plastic Equiv               |
| 294-549     | AMPHENOL | M81969/14-01 | 100503     | 22D  | 300491                | 100502 | Plastic Equiv               |
| 294-559     | AMPHENOL | M81969/14-02 | 100803     | 20   | 300791                | 100782 | Plastic Equiv               |
| 6500-001-12 | MATRIX   | M81969/14-04 | 101553     | 12   | 30                    | 301602 | Plastic Equiv               |
| 6500-001-16 | MATRIX   | M81969/14-03 | 101033     | 16   | 30                    | 301092 | Plastic Equiv               |
| 6500-001-20 | MATRIX   | M81969/14-02 | 100803     | 20   | 30                    | 300782 | Plastic Equiv               |
| 6500-001-22 | MATRIX   | M81969/14-01 | 100503     | 22   | 30                    | 100502 | Plastic Equiv               |
| 6500-010-16 | MATRIX   | M81969/14-03 | 101033     | 16   | 151071                | 151122 | Plastic Equiv               |
| 6500-010-20 | MATRIX   | M81969/14-02 | 100803     | 20   | 150801                | 150802 | Plastic Equiv               |
| 6500-018-00 | MATRIX   | M81969/29-04 |            | 0    |                       | 105652 |                             |
| 6500-018-04 | MATRIX   | M81969/29-03 |            | 4    |                       | 104262 |                             |
| 6500-018-08 | MATRIX   | M81969/29-02 | 102712     | 8    |                       | 102812 | Metal Pliers-MIL-C-5015     |
| 6500-028-12 | MATRIX   |              |            | 12   |                       | 151612 |                             |
| 6500-028-16 | MATRIX   |              |            | 16   |                       | 151092 |                             |
| 6500-028-20 | MATRIX   |              |            | 20   |                       | 150792 |                             |
| 6500-029-12 | MATRIX   |              |            | 12   | 151601                | 151602 |                             |
| 6500-029-16 | MATRIX   |              |            | 16   | 151071                | 151122 |                             |
| 6500-029-20 | MATRIX   |              |            | 20   | 150801                | 150802 |                             |
| 6500-030-12 | MATRIX   |              |            | 12   | 821601                |        |                             |
| 6500-030-16 | MATRIX   |              |            | 16   | 821121                |        |                             |
| 6500-030-20 | MATRIX   |              |            | 20   | 820791                |        |                             |
| 6500-101-12 | MATRIX   | M81969/14-04 | 101553     | 12   | 151601                | 151602 | Plastic Equiv               |
| 8522-12     | SOURIAU  | M81969/14-04 | 101553     | 12   | 151601                | 151602 | Plastic Equiv               |
| 8522-16     | SOURIAU  | M81969/14-03 | 101033     | 16   | 151071                | 151122 | Plastic Equiv               |
| 8522-20     | SOURIAU  | M81969/14-02 | 100803     | 20   | 150801                | 150802 | Plastic Equiv               |
| 91066-1     | AMP      | M81969/1-01  | 100533     | 22   | 200541                | 200532 | Metal Functional Equivalent |
| 91066-2     | AMP      | M81969/1-02  | 100723     | 20   | 200711                | 200712 | Metal Functional Equivalent |
| 91066-3     | AMP      | M81969/1-03  | 101123     | 16   | 151071                | 151122 | Joggled Tool                |
| 91067-1     | AMP      | M81969/1-04  | 100573     | 22   | 200541                | 200532 | Plastic Equiv               |
| 91067-2     | AMP      | M81969/1-02  | 100723     | 20   | 200711                | 200762 | Metal Functional Equivalent |
| CET 0-1     | CANNON   | M81969/29-04 |            | 0    |                       | 105652 |                             |
| CET 12-4    | CANNON   | M81969/14-04 | 101553     | 12   |                       | 151602 | Plastic Equiv               |
| CET 16-9    | CANNON   | M81969/14-03 | 101033     | 16   |                       | 151122 | Plastic Equiv               |
| CET 20-11   | CANNON   | M81969/1-02  | 100723     | 20   |                       | 200712 | Metal Functional Equivalent |
| CET 20-11HD | CANNON   | M81969/1-02  | 100723     | 20   |                       | 200712 | Metal Functional Equivalent |
| CET 20-14   | CANNON   | M81969/1-02  | 100723     | 20   |                       | 200762 | Metal Functional Equivalent |
| CET 20-21   | CANNON   | M81969/14-02 | 100803     | 20   |                       |        | Plastic Equiv               |
| CET 20-8    | CANNON   | M81969/14-02 | 100803     | 20   |                       | 150802 | Plastic Equiv               |
| CET 4-8     | CANNON   | M81969/29-03 |            | 4    |                       | 104262 |                             |
| CET 8-2     | CANNON   | M81969/29-02 | 102712     | 8    |                       | 102812 | Metal Pliers-MIL-C-5015     |
| CET C8      | CANNON   | M81969/29-02 | 102712     | 8    |                       | 102812 | Metal Pliers-MIL-C-5015     |

**PLASTIC TOOLS**

| Contact No.   | Company     | M81969       | Plastic No | Size | Metal Equip<br>Instal | Rem        | Description                 |            |
|---------------|-------------|--------------|------------|------|-----------------------|------------|-----------------------------|------------|
| CIET 12       | CANNON      | M81969/14-04 | 101553     | 12   | 151601                | 151602     | Plastic Equip               |            |
| CIET 16       | CANNON      | M81969/14-03 | 101033     | 16   | 151071                | 151122     | Plastic Equip               |            |
| CIET 20       | CANNON      | M81969/14-02 | 100803     | 20   | 150801                | 150802     | Plastic Equip               |            |
| CIET 20-18    | CANNON      |              |            | 20   | 200761                | 200762     |                             |            |
| CIET 20HD2    | CANNON      | M81969/14-01 | 100503     | 20   | 200761                | 200762     | Plastic Equip               |            |
| CIET 20HDB    | CANNON      |              |            | 20   | 200761                | 200762     |                             |            |
| CIET 22       | CANNON      | M81969/14-01 | 100503     | 22   | 100501                | 100502     | Plastic Equip               |            |
| CIET 22D      | CANNON      | M81969/14-01 | 100503     | 22D  | 100501                | 100502     | Plastic Equip               |            |
| CNO 930-0012  | CINCH (TRW) | M81969/14-04 | 101553     | 12   | 151601                | 151602     | Plastic Equip               |            |
| CNO 930-0016  | CINCH (TRW) | M81969/14-03 | 101033     | 16   | 151071                | 151122     | Plastic Equip               |            |
| CNO 930-0020  | CINCH (TRW) | M81969/14-02 | 100803     | 20   | 150801                | 150802     | Plastic Equip               |            |
| M15570-12     | DEUTSCH     | M81969/14-04 | 101553     | 12   | 151601                | 151602     | Plastic Equip               |            |
| M15570-16     | DEUTSCH     | M81969/14-03 | 101033     | 16   | 151071                | 151122     | Plastic Equip               |            |
| M15570-20     | DEUTSCH     | M81969/14-02 | 100803     | 20   | 150801                | 150802     | Plastic Equip               |            |
| M15570-22     | DEUTSCH     |              |            | 22   | 550481                | 550482     |                             |            |
| M15570-22-1   | DEUTSCH     |              |            | 22   | 550351                | 550472     |                             |            |
| M24308/18-2   | POSITRONICS | M81969/39-01 | 100693     | 20   | 200721                | 200762     | Plastic Equip               |            |
| M81515-12     | DEUTSCH     | M81969/16-03 | 101463     | 12   | CALL FACTORY          | CALL FACT. |                             | Metal Tool |
| M81515-16     | DEUTSCH     | M81969/16-02 | 100883     | 16   | CALL FACTORY          | CALL FACT. |                             | Metal Tool |
| M81515-20     | DEUTSCH     | M81969/16-01 | 100583     | 20   | CALL FACTORY          | CALL FACT. |                             |            |
| M81515-23     | DEUTSCH     | M81969/16-04 | 100483     | 23   | CALL FACTORY          | CALL FACT. |                             |            |
| M83723/31-12  | MIL-STD.    | M81969/14-04 | 101553     | 12   | 151601                | 151602     | Plastic Equip               |            |
| M83723/31-16  | MIL-STD.    | M81969/14-03 | 101033     | 16   | 151071                | 151122     | Plastic Equip               |            |
| M83723/31-20  | MIL-STD.    | M81969/14-02 | 100803     | 20   | 150801                | 150802     | Plastic Equip               |            |
| M83723/31-22D |             | M81969/14-01 | 100503     | 22D  |                       |            | Plastic Equip               |            |
| M83723/32-00  | MIL-STD.    | M81969/29-04 |            | 0    |                       | 105652     |                             |            |
| M83723/32-04  | MIL-STD.    | M81969/29-03 |            | 4    |                       | 104262     |                             |            |
| M83723/32-08  | MIL-STD.    | M81969/29-02 | 102712     | 8    |                       | 102812     | Metal Pliers-MIL-C-5015     |            |
| MS18278-1     | MIL-STD.    | M81969/39-01 | 100693     | 20   | 200721                | 200762     | Plastic Equip               |            |
| MS27509A-12   | MIL-STD.    | M81969/14-04 | 101553     | 12   | 101601                |            | Plastic Equip               |            |
| MS27509A-16   | MIL-STD.    | M81969/14-03 | 101033     | 16   | 101091                |            | Plastic Equip               |            |
| MS27509A-20   | MIL-STD.    | M81969/14-02 | 100803     | 20   | 100781                |            | Plastic Equip               |            |
| MS27509A-22   | MIL-STD.    | M81969/14-01 | 100503     | 22   | 100601                |            | Plastic Equip               |            |
| MS27509R-12   | MIL-STD.    | M81969/14-04 | 101553     | 12   |                       | 101602     | Plastic Equip               |            |
| MS27509R-16   | MIL-STD.    | M81969/14-03 | 101033     | 16   |                       | 101092     | Plastic Equip               |            |
| MS27509R-20   | MIL-STD.    | M81969/14-02 | 100803     | 20   |                       | 100782     | Plastic Equip               |            |
| MS27509R-22   | MIL-STD.    | M81969/14-01 | 100503     | 22   |                       | 100602     | Plastic Equip               |            |
| MS27534-12    | MIL-STD.    | M81969/14-04 | 101553     | 12   | 101601                | 101602     | Plastic Equip               |            |
| MS27534-16    | MIL-STD.    | M81969/14-03 | 101033     | 16   | 101091                | 101092     | Plastic Equip               |            |
| MS27534-20    | MIL-STD.    | M81969/14-02 | 100803     | 20   | 100781                | 100782     | Plastic Equip               |            |
| MS27534-22    | MIL-STD.    | M81969/14-01 | 100503     | 22   | 100601                | 100602     | Plastic Equip               |            |
| MS27534-22D   | MIL-STD.    | M81969/14-01 | 100503     | 22D  | 100501                | 100502     | Plastic Equip               |            |
| MS3156-16     | MIL-STD.    | M81969/1-01  | 100533     | 16   | 151071                | 151122     | Metal Functional Equivalent |            |
| MS3156-20     | MIL-STD.    | M81968/1-02  |            | 20   | 200711                | 200712     |                             |            |
| MS3156-22     | MIL-STD.    | M81969/1-03  | 101123     | 22   | 200541                | 200532     | Joggled Tool                |            |
| MS3160-12     | MIL-STD.    | M81969/16-03 | 101463     | 12   | CALL FACTORY          | CALL FACT. |                             |            |
| MS3160-16     | MIL-STD.    | M81969/16-02 | 100883     | 16   | CALL FACTORY          | CALL FACT. |                             | Metal Tool |
| MS3160-20     | MIL-STD.    | M81969/16-01 | 100583     | 20   | CALL FACTORY          | CALL FACT. |                             | Metal Tool |
| MS3160-22     | MIL-STD.    | M81969/16-04 | 100483     | 22   | CALL FACTORY          | CALL FACT. |                             |            |
| MS3165-0      | MIL-STD.    | M81969/29-04 |            | 0    |                       | 105652     |                             |            |
| MS3165-4      | MIL-STD.    | M81969/29-03 |            | 4    |                       | 104262     |                             |            |
| MS3165-8      | MIL-STD.    | M81969/29-02 | 102712     | 8    |                       | 102812     | Metal Pliers-MIL-C-5015     |            |
| MS3447-12     | MIL-STD.    | M81969/14-04 | 101553     | 12   | 151601                | 151602     | Plastic Equip               |            |
| MS3447-16     | MIL-STD.    | M81969/14-03 | 101033     | 16   | 151071                | 151122     | Plastic Equip               |            |

| Contact No.  | Company       | M81969       | Plastic No   | Size | Metal Equiv<br>Instal | Rem    | Description                 |
|--------------|---------------|--------------|--------------|------|-----------------------|--------|-----------------------------|
| MS3447-20    | MIL-STD.      | M81969/14-02 | 100803       | 20   | 150801                | 150802 | Plastic Equiv               |
| RXT 12-9     | BURNDY        | M81969/14-04 | 101553       | 12   | 101601                | 101602 | Plastic Equiv               |
| RXT 16-9     | BURNDY        | M81969/14-03 | 101033       | 16   | 101091                | 101092 | Plastic Equiv               |
| RXT 20-36    | BURNDY        | M81969/14-02 | 100803       | 20   | 100781                | 100782 | Plastic Equiv               |
| RXT 22-1     | BURNDY        | M81969/14-01 | 100503       | 22   | 100601                | 100602 | Plastic Equiv               |
| RXT 24-3     | BURNDY        | M81969/14-01 | 100503       | 22M  | 100501                | 100502 | Plastic Equiv               |
| TP-201343-12 | PYLE NATIONAL |              | M81969/14-04 |      | 101553                | 12     | 151601 151602 Plastic Equiv |
| TP-201343-16 | PYLE NATIONAL |              | M81969/14-03 |      | 101033                | 16     | 151071 151122 Plastic Equiv |
| TP-201343-20 | PYLE NATIONAL |              | M81969/14-02 |      | 100803                | 20     | 150801 150802 Plastic Equiv |
| TP-20139-20  | PYLE NATIONAL |              | M81969/14-02 |      | 100803                | 20     | 300781 300782 Plastic Equiv |
| TP-20139-22D | PYLE NATIONAL |              | M81969/14-01 |      | 100503                | 22D    | 300501 300502 Plastic Equiv |

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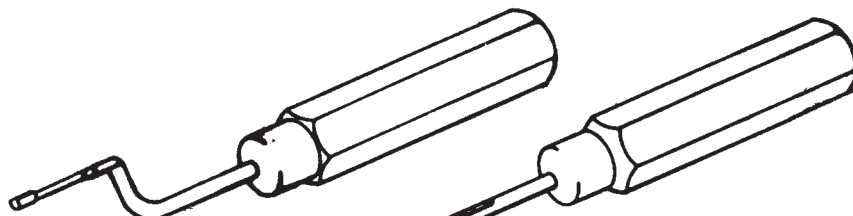
# *Tool Illustrations*

## PICO CORPORATION TOOL ILLUSTRATIONS

### Installation Tools

Series from 8 to 22 D

Using color coded handles and  
replaceable tips



ILL. A-1

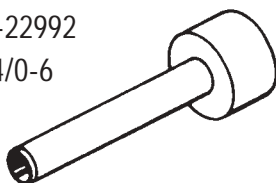
ILL. A-2

ILL. B

Class L>

MIL-C-22992

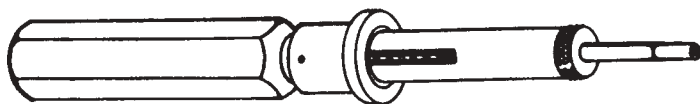
Sizes 4/0-6



ILL. C



ILL. D

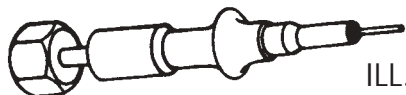


ILL. E

### Front Release Tools

MIL-C-005015, MIL-C-26500

and similiar connectors. Tools  
employ a fixed tip and moving  
shedder.



ILL. F

### Front Release Tools

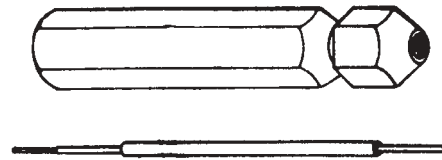
Designed with a "Floating" tip  
action, the tools are ideal for MIL-  
C-22857 and MIL-C-81511 Series 1  
& 2 Connectors. Typical  
applications are Hughes and  
Winchester Connectors.



ILL. G

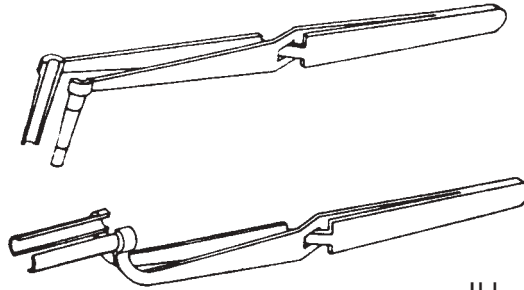


ILL. H



Single tool., double application is accomplished by a double-ended quill, removes pins & sockets by reversing quill.

ILL. I

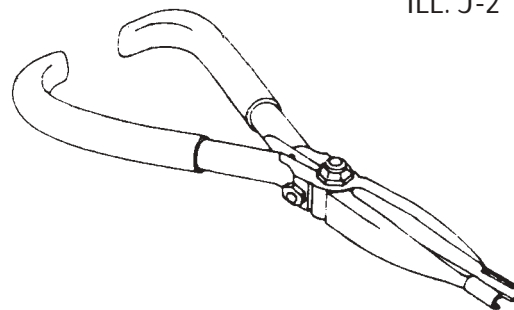


ILL. J-1

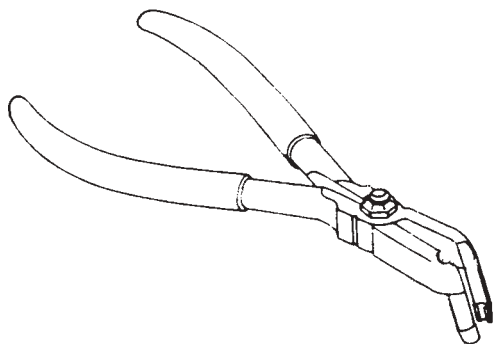
### Tweezer Tools

Rear release and installation tools. Tooling designed around MIL-C-38999, NAS 1599, MIL-C-005015, and MIL\_C-83723 connector requirements. These tools can be modified to Customer's specifications.

ILL. J-2



ILL. L



ILL. M

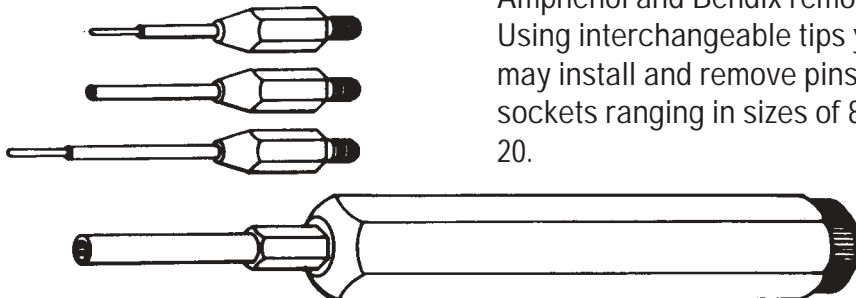
### Bendix Connector Pliers

Designed to service Bendix CE, SE, AN/MS and type F contacts. Sizes 8,12,16 & 20.

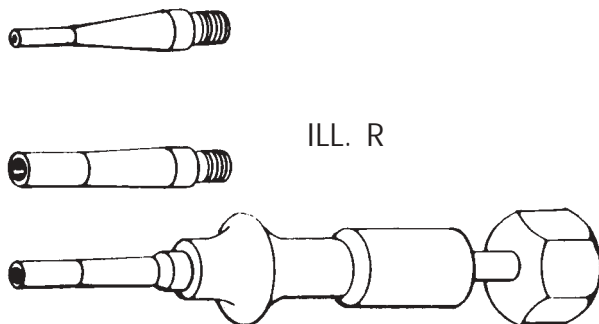
## PICO COROPRATION TOOL ILLUSTRATIONS

### Kit Tools

Amphenol and Bendix removal kits. Using interchangeable tips you may install and remove pins and sockets ranging in sizes of 8 thru 20.



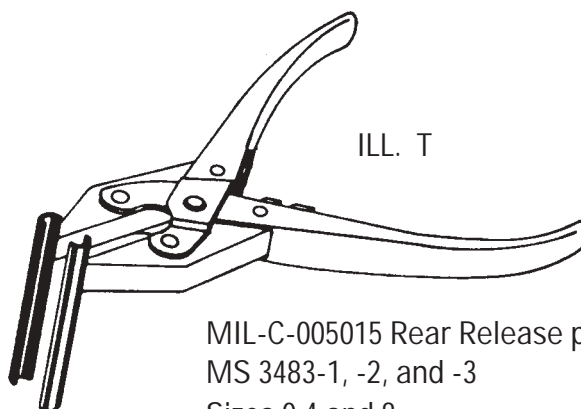
ILL. N Bendix Kit Illustrated  
ILL. P Similiar for Amphenol



ILL. R

Unwired contact removal tools used with MIL-C-83723, NAS 1599, MIL-C-8511 series 3 and 4 covers sizes 12-23.

ILL. Z - See Tips of Ill. N



ILL. T

MIL-C-005015 Rear Release plier to MS 3483-1, -2, and -3 Sizes 0,4 and 8.

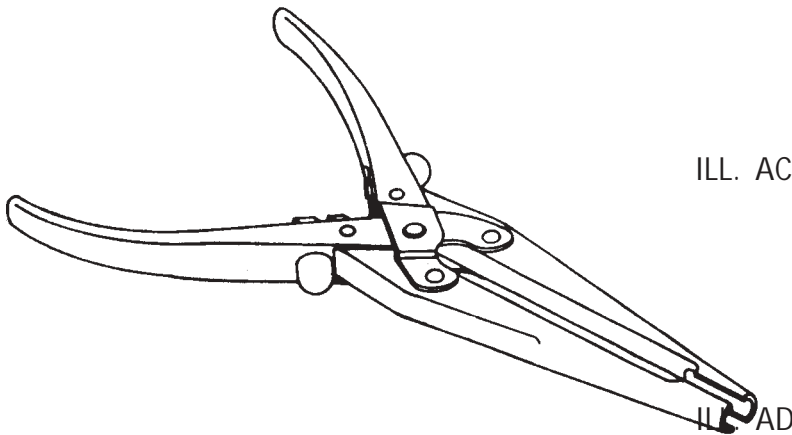
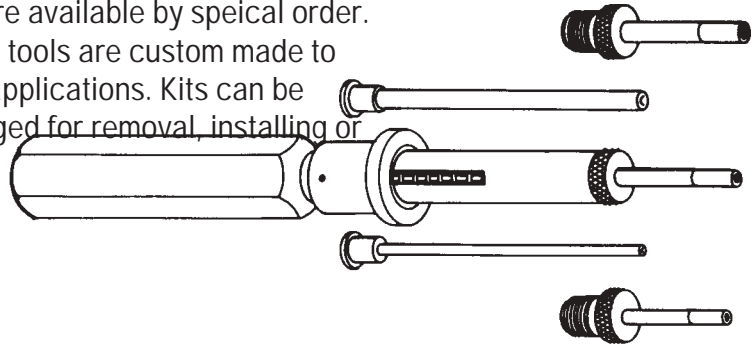


ILL. AB

MIL-C-005015 Installing tools, 0 through 16 gauges.

### Kits

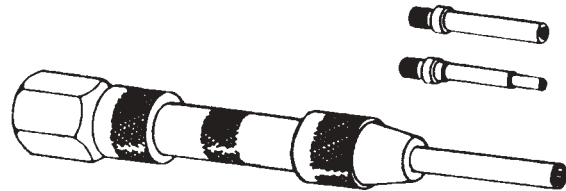
Kits are available by special order. These tools are custom made to your applications. Kits can be arranged for removal, installing or both.



ILL. AC

ILL. AD

Insertion pliers. Used to insert AN/MS and type "F" contacts.



ILL. AE

### Impact Tools

Typical of tools used for ITT CANNON connectors. Sizes from coax to 20 gage.

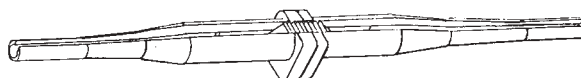
## PICO COROPRATION TOOL ILLUSTRATIONS

ILL. AF



Removal tools  
M81969/22  
Available in sizes 16, 20 & 22 gage

ILL. AG



ILL. AF

