

#### **WELDING/BRAZING OUTFITS**







| PART NO | VENDOR<br>Part no | HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP | BRAZING<br>TIP/NOZZLE      | TANK<br>KEY | CARRYING<br>Stand | OXYGEN<br>Cyl | FUEL<br>Cyl | OXYGEN<br>REG | FUEL<br>REG | HOSE    | GOGGLES | ACETYL<br>CK VALVE | OXYGEN<br>CK VALVE | STRIKER |
|---------|-------------------|--------|-----------------------|----------------|----------------------------|-------------|-------------------|---------------|-------------|---------------|-------------|---------|---------|--------------------|--------------------|---------|
| 87-K23  | K23               | 87-71  | Not Incl.             | Not Incl.      | 87-TYPE17#0<br>87-TYPE17#2 | Incl.       | Not Incl.         | Not Incl.     | Not Incl.   | 87-R0         | 87-RMC2     | 87-H32A | Incl.   | Not Incl.          | Not Incl.          | 87-FL34 |
| 87-K23C | K23C              | 87-71  | Not Incl.             | Not Incl.      | 87-TYPE17#0<br>87-TYPE17#2 | Incl.       | 87-500S           | Not Incl.     | Not Incl.   | 87-R0         | 87-RMC2     | 87-H32A | Incl.   | Not Incl.          | Not Incl.          | 87-FL34 |
| 87-K23P | K23P              | 87-71  | Not Incl.             | Not Incl.      | 87-TYPE17#0<br>87-TYPE17#2 | Incl.       | 87-511            | Not Incl.     | Not Incl.   | 87-R0         | 87-RMC2     | 87-H32A | Incl.   | Not Incl.          | Not Incl.          | 87-FL34 |



# **Welding/Brazing Outfit - Cap'n Hook**



|         | VENDOR  |        | CUTTING    | CUTTING  | BRAZING    | TANK | CARRYING | OXYGEN   | FUEL     | OXYGEN | FUEL    |         |         | ACETYL   | OXYGEN   |         |
|---------|---------|--------|------------|----------|------------|------|----------|----------|----------|--------|---------|---------|---------|----------|----------|---------|
| PART NO | PART NO | HANDLE | ATTACHMENT |          | TIP/NOZZLE | KEY  | STAND    |          |          | REG    | REG     | HOSE    | GOGGLES | CK VALVE | CK VALVE | STRIKER |
| 87-K22C | K22C    | 87-71  | Not Incl   | Not Incl | 87-TYPF#2  | Incl | 87-500\$ | Not Incl | Not Incl | 87-R0  | 87-RMC2 | 87-H32A | Incl    | Not Incl | Not Incl | 87-FI 3 |

#### **WELDING/BRAZING/CUTTING OUTFITS**

# **Welding/Brazing/Cutting Outfits - Uniweld**



| PART NO    | VENDOR<br>Part no | HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP | BRAZING<br>Tip/Nozzle          | TANK<br>Key    | CARRYING<br>STAND | OXYGEN<br>Cyl | FUEL<br>Cyl | OXYGEN<br>REG | FUEL<br>REG | HOSE    | GOGGLES | ACETYL<br>CK VALVE | OXYGEN<br>CK VALVE | STRIKER |
|------------|-------------------|--------|-----------------------|----------------|--------------------------------|----------------|-------------------|---------------|-------------|---------------|-------------|---------|---------|--------------------|--------------------|---------|
| 87-KL71-4  | KL71-4            | 87-71  | Incl.                 | Incl.<br>87-T  | 87-TYPE17#0<br>YPE17#1, 87-TYP | Incl.<br>E17#2 | Not Incl.         | Not Incl.     | Not Incl.   | 87-R0         | 87-RMC2     | 87-H32A | Incl.   | Not Incl.          | Not Incl.          | 87-FL34 |
| 87-KLC100P | KLC100P           | 87-71  | Incl.                 | Incl.          | 87-TYPE17#0<br>87-TYPE17#2     | Incl.          | 87-511            | Not Incl.     | Not Incl.   | Incl.         | Incl.       | 87-H32A | Incl.   | Not Incl.          | Not Incl.          | 87-FL34 |





### Welding/Brazing/Cutting Outfits - TurboTorch

# O TurboTorch

| PART NO   | VENDOR<br>Part no | HANDLE | CUTTING<br>ATTACHMENT | CUTTING<br>TIP | BRAZING<br>Tip/Nozzle  | TANK<br>KEY | CARRYING<br>Stand | OXYGEN<br>CYL | FUEL<br>CYL | OXYGEN<br>REG | FUEL<br>REG | HOSE      | GOGGLES | ACETYL<br>CK VALVE | OXYGEN<br>CK VALVE | STRIKER |
|-----------|-------------------|--------|-----------------------|----------------|------------------------|-------------|-------------------|---------------|-------------|---------------|-------------|-----------|---------|--------------------|--------------------|---------|
| 0386-1320 | CST-P             | Incl.  | Not Incl.             | Not Incl.      | 0387-0040<br>0387-0042 | Not Incl.   | Incl.<br>(MC & R) | Not Incl.     | Not Incl.   | Incl.         | Incl.       | 0386-1094 | Incl.   | Incl.              | Incl.              | Incl.   |
| 0386-1321 | CST-PT            | Incl.  | Not Incl.             | Not Incl.      | 0387-0040<br>0387-0042 | Incl.       | Incl.<br>(MC & R) | Type R        | Type MC     | Incl.         | Incl.       | 0386-1094 | Incl.   | Incl.              | Incl.              | Incl.   |
| 0386-1322 | CST-CP            | Incl.  | Incl.                 | Incl.          | 0387-0040<br>0387-0042 | Not Incl.   | Incl.<br>(MC & R) | Not Incl.     | Not Incl.   | Incl.         | Incl.       | 0386-1094 | Incl.   | Incl.              | Incl.              | Incl.   |
| 0386-1323 | CST-CPT           | Incl.  | Incl.                 | Incl.          | 0387-0040<br>0387-0042 | Incl.       | Incl.<br>(MC & R) | Type R        | Type MC     | Incl.         | Incl.       | 0386-1094 | Incl.   | Incl.              | Incl.              | Incl.   |
| 0386-1324 | CST-CM            | Incl.  | Incl.                 | Incl.          | 0387-0040<br>0387-0042 | Not Incl.   | Incl.<br>(MC & R) | Not Incl.     | Not Incl.   | Incl.         | Incl.       | 0386-1094 | Incl.   | Incl.              | Incl.              | Incl.   |
| 0386-1325 | CST-150C          | Incl.  | Incl.                 | Incl.          | 0387-0040<br>0387-0042 | Not Incl.   | Not Incl.         | Not Incl.     | Not Incl.   | Incl.         | Incl.       | 0386-1094 | Incl.   | Incl.              | Incl.              | Incl.   |
| 0386-1326 | CST-150           | Incl.  | Incl.                 | Incl.          | 0387-0040<br>0387-0042 | Not Incl.   | Not Incl.         | Not Incl.     | Not Incl.   | Incl.         | Incl.       | 0386-1094 | Incl.   | Incl.              | Incl.              | Incl.   |

#### **TORCH KITS**

#### 87-89600 (89600) Air/Acetylene Torch Kit



| PART NO  | VENDOR<br>Part no | AIR/ACETYLENE<br>SOFT SOLDER<br>COPPER TUBE SIZE (IN) | AIR/ACETYLENE<br>SILVER BRAZE<br>COPPER TUBE SIZE (IN) | HANDLE | HOSE   | REGULATOR | INCLUDES<br>TIP | TANK<br>CONNECTION |
|----------|-------------------|---|--|--------|--------|-----------|-----------------|--------------------|
| 87-89600 | 89600             | 3   | 1-5/8  | 87-TH6 | 87-H12 | 87-RB     | 87-A-3          | RB                 |



#### 0386-0335 (X-3B) Air/Acetylene Torch Kit







#### 0386-0336 (X-4B) Air/Acetylene Torch Kit









#### **TORCH KITS**

#### 0386-0338 (X-5B) Air/Acetylene Torch Kit





| PART NO   | VENDOR<br>Part no | AIR/ACETYLENE<br>SOFT SOLDER<br>COPPER TUBE SIZE (IN) | AIR/ACETYLENE<br>SILVER BRAZE<br>COPPER TUBE SIZE (IN) | HANDLE    | HOSE      | REGULATOR | INCLUDES<br>TIP | TANK<br>CONNECTION |   |
|-----------|-------------------|---|--|-----------|-----------|-----------|-----------------|--------------------|---|
| 0386-0338 | X-5B              | 1-1/2   | 3/4  | 0386-0308 | 0386-1090 | 0386-0725 | 0386-0102       | В                  | Ī |



### 0386-0339 (X-6MC) Air/Acetylene Torch Kit

# TurboTorch®





#### 0386-0832 (PL-5ADLX-MC) Air/Acetylene Torch Kit - Self-Igniting

# TurboTorch®

| PART NO   | VENDOR<br>Part no | AIR/ACETYLENE<br>SOFT SOLDER<br>COPPER TUBE SIZE (IN) | AIR/ACETYLENE<br>SILVER BRAZE<br>COPPER TUBE SIZE (IN) | HANDLE    | HOSE      | REGULATOR | INCLUDES<br>TIP          | TANK<br>CONNECTION |
|-----------|-------------------|---|--|-----------|-----------|-----------|--------------------------|--------------------|
| 0386-0832 | PL-5ADLX-MO       | 1-1/2   | 3/4  | 0386-0308 | 0386-1090 | 0386-0726 | Self-Igniting<br>3/16 in | MC                 |



### 0386-0833 (PL-5ADLX-B) Air/Acetylene Torch Kit - Self-Igniting

# □ TurboTorch<sup>®</sup>

| PART NO   | VENDOR<br>Part no | AIR/ACETYLENE<br>SOFT SOLDER<br>COPPER TUBE SIZE (IN) | AIR/ACETYLENE<br>SILVER BRAZE<br>Copper tube size (in) | HANDLE    | HOSE      | REGULATOR | INCLUDES<br>TIP        | TANK<br>CONNECTION |
|-----------|-------------------|---|--|-----------|-----------|-----------|------------------------|--------------------|
| 0386-0833 | PL-5ADLX-B        | 1-1/2   | 3/4  | 0386-0308 | 0386-1090 | 0386-0725 | Self-Igniting 3/16 in. | В                  |



#### 0386-0834 (PL-8ADLX-MC) Air/Acetylene Torch Kit - Self-Igniting

## TurboTorch®





#### 0386-0835 (PL-8ADLX-B) Air/Acetylene Torch Kit - Self-Igniting



| PART NO   | VENDOR<br>Part no | AIR/ACETYLENE<br>SOFT SOLDER<br>COPPER TUBE SIZE (IN) | AIR/ACETYLENE<br>SILVER BRAZE<br>COPPER TUBE SIZE (IN) | HANDLE    | HOSE      | REGULATOR | INCLUDES<br>TIP        | TANK<br>CONNECTION |
|-----------|-------------------|---|--|-----------|-----------|-----------|------------------------|--------------------|
| 0386-0835 | PL-8ADLX-B        | 2   | 1  | 0386-0308 | 0386-1090 | 0386-0725 | Self-Igniting 5/16 in. | В                  |

#### **TORCH KITS**

### 0386-0836 (PL-12ADLX-B) Air/Acetylene Torch Kit - Self-Igniting

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|           |             | AIR/ACETYLENE         | AIR/ACETYLENE         |           |           |           |               |            |
|-----------|-------------|-----------------------|-----------------------|-----------|-----------|-----------|---------------|------------|
|           | VENDOR      | SOFT SOLDER           | SILVER BRAZE          |           |           |           | INCLUDES      | TANK       |
| PART NO   | PART NO     | COPPER TUBE SIZE (IN) | COPPER TUBE SIZE (IN) | HANDLE    | HOSE      | REGULATOR |               | CONNECTION |
| 0386-0836 | PL-12ADLX-E | 3-1/2                 | 2                     | 0386-0308 | 0386-1090 | 0386-0725 | Self-Igniting | В          |
|           |             |                       |                       |           |           |           | 3/8 in.       |            |



### 0426-0011 (TDLX2003)

### Air/Acetylene Torch Kit w/Carrying Stand – Self-Igniting TurboTorch

| PART NO   | VENDOR<br>Part no | AIR/ACETYLENE<br>SOFT SOLDER<br>COPPER TUBE SIZE (IN) | AIR/ACETYLENE<br>SILVER BRAZE<br>COPPER TUBE SIZE (IN) | HANDLE    | HOSE      | REGULATOR | INCLUDES<br>TIP | TANK<br>CONNECTION |
|-----------|-------------------|---|--|-----------|-----------|-----------|-----------------|--------------------|
| 0426-0011 | TDLX2003          | 2   | 1/2 to 1   | 0386-0308 | 0386-1090 | 0386-0726 | 0386-0103       | MC                 |





#### 0386-0574 (TDLX2003B)

# 



|           |           | AIR/ACETYLENE         | AIR/ACETYLENE         |           |           |           |           |            |  |
|-----------|-----------|-----------------------|-----------------------|-----------|-----------|-----------|-----------|------------|--|
|           | VENDOR    | SOFT SOLDER           | SILVER BRAZE          |           |           |           | INCLUDES  | TANK       |  |
| PART NO   | PART NO   | COPPER TUBE SIZE (IN) | COPPER TUBE SIZE (IN) | HANDLE    | HOSE      | REGULATOR |           | CONNECTION |  |
|           |           |                       |                       |           |           |           |           |            |  |
| 0386-0574 | TDLX2003B | 1/4 to 2              | 1/8 to 1              | 0386-0308 | 0386-1090 | 0386-0725 | 0386-0101 | В          |  |



#### **HAND TORCH KITS**

### **Propane/MAPP Hand Torch Kit**



| PART NO  | VENDOR<br>PART NO | PROPANE SOFT SOLDER<br>COPPER TUBE SIZE (IN) | PROPANE SILVER BRAZE<br>Copper tube size (In) | MAPP SOFT SOLDER<br>Copper Tube Size (In) | MAPP SILVER BRAZE<br>Copper tube size (In) |  |
|----------|-------------------|--|---|---|--|--|
| 87-RP3T5 | RP3T5             | Up to 1                                      | Up to 5/8                                     | Up to 1-1/2                               | Up to 7/8                                  |  |



#### **Propane/MAPP Hand Torch Kit – Self-Igniting**

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| PART NO  | VENDOR<br>Part no | PROPANE SOFT SOLDER<br>Copper Tube Size (In) | PROPANE SILVER BRAZE<br>COPPER TUBE SIZE (IN) | MAPP SOFT SOLDER<br>Copper Tube Size (In) | MAPP SILVER BRAZE<br>COPPER TUBE SIZE (IN) |  |
|----------|-------------------|--|---|---|--|--|
| 87-RP3T6 | RP3T6             | Up to 1                                      | Up to 5/8                                     | Up to 1-1/2                               | Up to 7/8                                  |  |



#### 0386-0403 (STK-9) Propane/MAPP Hand Torch Kit

# □ TurboTorch<sup>®</sup>

| PART NO   | VENDOR  | PROPANE SOFT SOLDER   | PROPANE SILVER BRAZE  | MAPP SOFT SOLDER      | MAPP SILVER BRAZE     | INCLUDES  |
|-----------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
|           | PART NO | COPPER TUBE SIZE (IN) | TIP       |
| 0386-0403 | STK-9   | 1/4 to 3              | 1/4 to 1              | 1/4 to 3-1/2          | 1/4 to 1-3/4          | 0386-0171 |



#### HAND TORCH KITS

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#### 0386-0575 (STK-31) Propane/MAPP Hand Torch Kit



| PART NO   | VENDOR  | PROPANE SOFT SOLDER   | PROPANE SILVER BRAZE  | MAPP SOFT SOLDER      | MAPP SILVER BRAZE     | INCLUDES               |
|-----------|---------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
|           | Part no | Copper tube size (In) | TIP                    |
| 0386-0575 | STK-31  | Up to 3               | Up to 1               | Up to 3-1/2           | Up to 1-3/4           | 0386-0170<br>0386-0171 |



#### 0386-1283 (STK-11)

#### **Propane/MAPP Hand Torch Kit – Double Tip**



| PART NO   | VENDOR  | PROPANE SOFT SOLDER   | PROPANE SILVER BRAZE  | MAPP SOFT SOLDER      | MAPP SILVER BRAZE     | INCLUDES  |
|-----------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
|           | Part no | COPPER TUBE SIZE (IN) | TIP       |
| 0386-1283 | STK-11  | 1 to 4                | 1/2 to 2              | 1-1/2 to 2            | 3/4 to 3              | 0386-1282 |



#### 0386-0851 (STK-99)

### **Propane/MAPP Hand Torch Kit - Self-Igniting**

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| PART NO   | VENDOR  | PROPANE SOFT SOLDER   | PROPANE SILVER BRAZE  | MAPP SOFT SOLDER      | MAPP SILVER BRAZE     | INCLUDES  |
|-----------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
|           | Part no | COPPER TUBE SIZE (IN) | TIP       |
| 0386-0851 | STK-99  | 1/4 to 3              | 1/4 to 1              | 1/4 to 3-1/2          | 1/4 to 1-3/4          | 0386-0850 |



#### 0386-1293 (TX504)

#### **Propane/MAPP Hand Torch Kit - Self-Igniting**

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| PART NO   | VENDOR  | PROPANE SOFT SOLDER   | PROPANE SILVER BRAZE  | MAPP SOFT SOLDER      | MAPP SILVER BRAZE     | INCLUDES  |
|-----------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
|           | PART NO | Copper tube size (In) | TIP       |
| 0386-1293 | TX504   | 3/4 to 3              | 1/4 to 1              | 3/4 to 4              | 1/4 to 1-1/4          | 0386-1296 |



#### 0386-1297 (TX503)

#### **Propane/MAPP Hand Torch Kit – Self-Igniting**

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| PART NO   | VENDOR  | PROPANE SOFT SOLDER   | PROPANE SILVER BRAZE  | MAPP SOFT SOLDER      | MAPP SILVER BRAZE     | INCLUDES  |
|-----------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
|           | Part no | Copper tube size (In) | TIP       |
| 0386-1297 | TX503   | 1/8 to 2              | 1/16 to 3/4           | 1/8 to 3              | 1/16 to 1             | 0386-1298 |



#### 0386-1299 (TX500)

#### **Propane/MAPP Hand Torch Kit - Self-Igniting**

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| PART NO   | VENDOR  | PROPANE SOFT SOLDER   | PROPANE SILVER BRAZE  | MAPP SOFT SOLDER      | MAPP SILVER BRAZE     | INCLUDES               |
|-----------|---------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
|           | Part no | Copper tube size (In) | TIP                    |
| 0386-1299 | TX500   | 1/8 to 3              | 1/16 to 1             | 1/8 to 4              | 1/16 to 1-1/4         | 0386-1296<br>0386-1298 |

#### **HAND TORCH KITS**

#### 0386-0170 (ST-1) Propane/MAPP Tip





| PART NO   | VENDOR<br>Part no | PROPANE SOFT SOLDER<br>COPPER TUBE SIZE (IN) | PROPANE SILVER BRAZE<br>Copper tube size (In) | MAPP SOFT SOLDER<br>Copper Tube Size (In) | MAPP SILVER BRAZE<br>Copper Tube Size (In) |  |
|-----------|-------------------|--|---|---|--|--|
| 0386-0170 | ST-1              | 1/8 to 1/2                                   | 1/8 to 3/8                                    | 1/8 to 3/4                                | 1/8 to 1/2                                 |  |

#### 0386-0171 (ST-3) Propane/MAPP Tip

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| PART NO   | VENDOR<br>Part no | PROPANE SOFT SOLDER<br>Copper Tube Size (In) | PROPANE SILVER BRAZE<br>Copper tube size (In) | MAPP SOFT SOLDER<br>Copper Tube Size (In) | MAPP SILVER BRAZE<br>Copper Tube Size (In) |  |
|-----------|-------------------|--|---|---|--|--|
| 0386-0171 | ST-3              | 1/4 to 3                                     | 1/4 to 1                                      | 1/4 to 3-1/2                              | 1/4 to 1-3/4                               |  |



#### 0386-1282 (ST-11) Propane/MAPP Tip

## TurboTorch°

| PART NO   | VENDOR<br>Part no | PROPANE SOFT SOLDER<br>COPPER TUBE SIZE (IN) | PROPANE SILVER BRAZE<br>Copper tube size (In) | MAPP SOFT SOLDER<br>Copper Tube Size (In) | MAPP SILVER BRAZE<br>COPPER TUBE SIZE (IN) |  |
|-----------|-------------------|--|---|---|--|--|
| 0386-1282 | ST-11             | 1 to 4                                       | 1/2 to 2                                      | 1-1/2 to 6                                | 3/4 to 3                                   |  |



#### 0386-1296 (T-504) Propane/MAPP Tip

## TurboTorch°

| PART NO   | VENDOR  | PROPANE SOFT SOLDER   | PROPANE SILVER BRAZE  | MAPP SOFT SOLDER      | MAPP SILVER BRAZE     |
|-----------|---------|-----------------------|-----------------------|-----------------------|-----------------------|
|           | Part no | COPPER TUBE SIZE (IN) |
| 0386-1296 | T-504   | 3/4 to 3              | 1/4 to 1              | 3/4 to 4              | 1/4 to 1-1/4          |



#### 0386-1298 (T-503) Propane/MAPP Tip

# ○ TurboTorch®

| PART NO   | VENDOR<br>Part no | PROPANE SOFT SOLDER<br>COPPER TUBE SIZE (IN) | PROPANE SILVER BRAZE<br>COPPER TUBE SIZE (IN) | MAPP SOFT SOLDER<br>Copper Tube Size (In) | MAPP SILVER BRAZE<br>Copper tube size (in) |  |
|-----------|-------------------|--|---|---|--|--|
| 0386-1298 | T503              | 1/8 to 2                                     | 1/16 to 3/4                                   | 1/8 to 3                                  | 1/16 to 1                                  |  |



#### **Oxy/Acetylene Brazing Nozzles**

### ○ TurboTorch®

| PART NO   | TIP SIZE (IN) | OXY/ACETYLENE SILVER BRAZE COPPER TUBE SIZE (IN) | USED WITH HANDLE |  |
|-----------|---------------|--|------------------|--|
| 0387-0040 | 0             | 1/4 to 1   | 0386-0311        |  |
| 0387-0039 | 00            | 1/8 to 3/4                                       | 0386-0311        |  |
| 0387-0041 | 1             | 1/4 to 1-1/4                                     | 0386-0311        |  |
| 0387-0042 | 2             | 1/2 to 1-1/2                                     | 0386-0311        |  |
| 0387-0043 | 3             | 3/4 to 1-3/4                                     | 0386-0311        |  |



#### **ACETYLENE TIPS**



#### **Acetylene Twister Tips**

|         |                   |  |   | UNIWELD. |
|---------|-------------------|--|---|----------|
| PART NO | VENDOR<br>Part no | AIR/ACETYLENE SOFT SOLDER<br>COPPER TUBE SIZE (IN) | AIR/ACETYLENE SILVER BRAZE<br>Copper tube size (In) |          |
| 87-A-11 | A-11              | 1-1/4 to 3   | 7/8 to 1-5/8  |          |
| 87-A-3  | A-3               | Up to 1  | Up to 1/2   |          |
| 87-A-5  | A-5               | 3/4 to 1-1/2                                       | 1/4 to 3/4  |          |
| 87-A-8  | A-8               | 1 to 2   | 1/2 to 1  |          |



#### **Type17 Weld/Braze Tips**

|             |                   | •   |                                    | UNIWELD |
|-------------|-------------------|---|------------------------------------|---------|
| PART NO     | VENDOR<br>Part no | AIR/ACETYLENE SILVER BRAZE<br>Copper tube size (in) | WELDING<br>Material Thickness (In) |         |
| 87-TYPE17#0 | TYPE 17#0         | 1/2   | 5/64                               |         |
| 87-TYPE17#2 | TYPE 17#2         | 1   | 1/8                                |         |
| 87-TYPE17#3 | TYPE 17#3         | 1-1/2   | 3/16                               |         |
| 87-TYPE17#4 | TYPE 17#4         | 2   | 1/4                                |         |



### **Micro 6000 Miniature Tips**

| PART NO  | VENDOR<br>Part no | OXY/ACETYLENE SILVER BRAZE<br>COPPER TUBE SIZE (IN) |
|----------|-------------------|---|
| 87-MTW#2 | MTW#2             | Up to 1   |





## **Cap'n Hook Tips**

| PART NO  | VENDOR<br>Part no | OXY/ACETYLENE SILVER BRAZE<br>Copper tube size (IN) | DNIWELD |
|----------|-------------------|---|---------|
| 87-MTF#3 | MTF#3             | 7/8 to 1-5/8  |         |
| MTF-5    | MTF-5             | Up to 1   |         |



() TurboTorch



#### **Rosebud Heating Tips**

|              |                   | •   | UNIWELD' |
|--------------|-------------------|---|----------|
| PART NO      | VENDOR<br>Part no | OXY/ACETYLENE SILVER BRAZE<br>Copper tube size (in) |          |
| 87-TYPE17#15 | TYPE 17#15        | 1/8 to 2-5/8  |          |
| 87-TYPF17-30 | TYPF 17#30        | 1/2 to 6  |          |



#### **Extreme Self-Igniting Tips**

| PART NO   | VENDOR<br>Part no | TIP SIZE (IN) | AIR/ACETYLENE SOFT SOLDER<br>Copper tube Size (IN) | AIR/ACETYLENE SILVER BRAZE<br>Copper tube size (in) |  |
|-----------|-------------------|---------------|--|---|--|
| 0386-0818 | PL-5A             | 3/16          | 3/4 to 1-1/2                                       | 1/4 to 3/4  |  |
| 0386-0874 | PL-3A             | 1/4           | 1/4 to 1   | 1/8 to 1/2  |  |
| 0386-0819 | PL-8A             | 5/16          | 1 to 2   | 1/2 to 1  |  |
| 0386-0820 | PL-12A            | 3/8           | 2 to 4   | 1 to 2  |  |

#### **ACETYLENE TIPS**

# TurboTorch

#### **Extreme Standard Tips**



| PART NO   | VENDOR<br>Part no | TIP SIZE (IN) | AIR/ACETYLENE SOFT SOLDER<br>Copper tube Size (In) | AIR/ACETYLENE SILVER BRAZE<br>Copper tube size (in) |  |
|-----------|-------------------|---------------|--|---|--|
| 0386-100  | A-2               | 1/8           | 1/8 to 1/2   | 1/8 to 1/4  |  |
| 0386-0101 | A-3               | 3/16          | 1/4 to 1   | 1/8 to 1/2  |  |
| 0386-0102 | A-5               | 1/4           | 3/4 to 1-1/2                                       | 1/4 to 3/4  |  |
| 0386-0103 | A-8               | 5/16          | 1 to 2   | 1/2 to 1  |  |
| 0386-0104 | A-11              | 7/16          | 1-1/2 to 3   | 7/8 to 1-5/8  |  |
| 0386-0105 | A-14              | 1/2           | 2 to 3-1/2   | 1 to 2  |  |
| 0386-0106 | A-32              | 3/4           | 4 to 6   | 1-1/2 to 4  |  |

#### **TORCH HANDLES**



#### 87-TH6 (TH6) Air/Acetylene Torch Handle



| PART NO | VENDOR PART NO | FUEL          | HOSE CONNECTION |
|---------|----------------|---------------|-----------------|
| 87-TH6  | TH6            | Air/Acetylene | A-LH (3/8-24)   |



#### 87-71 (71) Oxy/Acetylene Torch Handle



| PART NO | VENDOR PART NO | FUEL          | HOSE CONNECTION                  |  |
|---------|----------------|---------------|----------------------------------|--|
| 87-71   | 71             | Oxy/Acetylene | A- LH (3/8-24) and A-RH (3/8-24) |  |



#### **Check Valve for Torch/Welding Handles**



Provides protection against reverse flow of gases, but not flame flashback.

| PART NO | VENDOR PART NO | DESCRIPTION                                    |
|---------|----------------|--|
| 87-TCVA | TCVA           | Check Valves [A-LH (3/8-24) and A-RH (3/8-24)] |



#### 0386-0308 (G4) Oxy/Acetylene Torch Handle

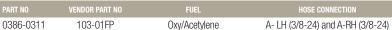


| PART NO   | VENDOR PART NO | FUEL          | HOSE CONNECTION |
|-----------|----------------|---------------|-----------------|
| 0386-0308 | G4             | Air/Acetylene | A-LH (3/8-24)   |



#### 0386-0311 (103-01FP) Oxy/Acetylene Torch Handle







#### **CUTTING TOOLS**

#### **Cutting Attachment - Oxy/Acetylene**



| PARI NU  | VENDOR PART NO | DESCRIPTION                        |
|----------|----------------|------------------------------------|
| 87-CA550 | CA550          | Cutting Attachment - Oxy/Acetylene |



#### **CUTTING TOOLS**

# -

#### **Cutting Tip - Oxy/Acetylene**





| PART NO     | VENDOR PART NO | DESCRIPTION               |
|-------------|----------------|---------------------------|
| 87-5-101#0D | 5-101#0D       | Oxy/Acetylene Cutting Tip |

#### **Cutting Attachment - Oxy/Acetylene**



| PARI NU   | DESCRIPTION                                    |
|-----------|--|
| 0387-0003 | Cutting Attachment - Oxy/Acetylene (CA1260-CS) |

#### **REGULATORS**



#### Regulators - Acetylene



| PART NO | FUEL      | HIGH PRESSURE<br>Gauge (PSIG) | LOW PRESSURE<br>Gauge (PSIG) | DELIVERY<br>RANGE (PSIG) | GAUGE<br>Diameter (in) | INLET<br>Connect (CGA) | OUTLET<br>CONNECTION |
|---------|-----------|-------------------------------|------------------------------|--------------------------|------------------------|------------------------|----------------------|
| 87-RB   | Acetylene | 400 (Full)                    | _                            | 2 to 15                  | 1-1/2                  | 520                    | A-LH (3/8-24)        |
| 87-RMC2 | Acetylene | 400 (Full)                    | 30                           | 2 to 15                  | 1-1/2                  | 200                    | A-LH (3/8-24)        |

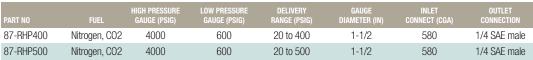
#### **Regulators - Nitrogen**





### Regulators - Nitrogen/CO2







#### Regulators - Oxygen

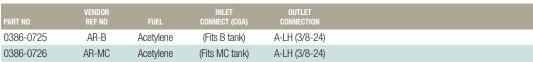


| PART NO | FUEL   | HIGH PRESSURE<br>Gauge (PSIG) | LOW PRESSURE<br>Gauge (PSIG) | DELIVERY<br>RANGE (PSIG) | GAUGE<br>Diameter (in) | INLET<br>CONNECT (CGA) | OUTLET<br>CONNECTION |  |
|---------|--------|-------------------------------|------------------------------|--------------------------|------------------------|------------------------|----------------------|--|
| 87-R0   | Oxvaen | 4000                          | 100                          | 2 to 60                  | 1-1/2                  | 540                    | A-RH (3/8-24)        |  |



#### Regulators - Acetylene (MC or B Tanks)







#### Regulators - Acetylene



| PART NO   | FUEL      | HIGH PRESSURE<br>GAUGE (PSIG) | LOW PRESSURE<br>Gauge (PSIG) | DELIVERY<br>RANGE (PSIG) | GAUGE<br>Diameter (in) | INLET<br>Connect (CGA) | OUTLET<br>CONNECTION |
|-----------|-----------|-------------------------------|------------------------------|--------------------------|------------------------|------------------------|----------------------|
| 0386-0784 | Acetylene | 400                           | 30                           | 2 to 15                  | 1-1/2                  | 200                    | A-LH (3/8-24)        |



#### **REGULATORS**

#### Regulators - Nitrogen





| PART NO   | FUEL     | HIGH PRESSURE<br>GAUGE (PSIG) | LOW PRESSURE<br>Gauge (PSIG) | DELIVERY<br>RANGE (PSIG) | GAUGE<br>Diameter (in) | INLET<br>Connect (CGA) | OUTLET<br>CONNECTION |
|-----------|----------|-------------------------------|------------------------------|--------------------------|------------------------|------------------------|----------------------|
| 0386-0814 | Nitrogen | 4000                          | 600                          | 0 to 500                 | 1-1/2                  | 580                    | 1/4 SAE male         |

#### Regulators - Oxygen

# □ TurboTorch<sup>®</sup>

| PART NO   | FUEL   | HIGH PRESSURE<br>GAUGE (PSIG) | LOW PRESSURE<br>Gauge (PSIG) | DELIVERY<br>RANGE (PSIG) | GAUGE<br>Diameter (IN) | INLET<br>Connect (CGA) | OUTLET<br>CONNECTION |
|-----------|--------|-------------------------------|------------------------------|--------------------------|------------------------|------------------------|----------------------|
| 0386-0786 | Oxygen | 4000                          | 100                          | 4 to 80                  | 1-1/2                  | 540                    | A-RH (3/8-24)        |

#### **GAUGES**

# Gauges



| PART NO  | VENDOR<br>PART NO | FUEL      | MAXIMUM<br>PRESSURE (PSIG) | GAUGE<br>DIAMETER (IN) | STEEL<br>Case Color | PROTECTIVE<br>BOOT | THREAD<br>SIZE NPT (IN) |
|----------|-------------------|-----------|----------------------------|------------------------|---------------------|--------------------|-------------------------|
| 87-G15-D | G15-D             | Acetylene | 30                         | 1-1/2                  | Red                 | Yes                | 1/8                     |
| 87-G19-D | G19-D             | Acetylene | 400 (Full)                 | 1-1/2                  | Red                 | Yes                | 1/8                     |
| 87-G49-D | G49-D             | _         | 100                        | 1-1/2                  | Green               | Yes                | 1/8                     |
| 87-G7SD  | G7SD              | _         | 4,000                      | 1-1/2                  | Gold                | _                  | 1/8                     |
| 87-G56-D | G56-D             | _         | 4,000                      | 1-1/2                  | Green               | Yes                | 1/8                     |
| 87-G8D   | G8D               | _         | 600                        | 1-1/2                  | Brass               | _                  | 1/8                     |

#### **HOSES**



#### **Acetylene Hoses - Uniweld**



| PART NO | VENDOR  | FITTING        | HOSE        |
|---------|---------|----------------|-------------|
|         | Part no | Type           | Length (FT) |
| 87-H12  | H12     | Δ-I H (3/8-24) | 12-1/2      |

#### **Acetylene Hoses – TurboTorch**



| PART NO   | VENDOR<br>Part no | FITTING<br>Type | HOSE<br>Length (FT) |
|-----------|-------------------|-----------------|---------------------|
| 0386-1090 | AH-12             | A-LH (3/8-24)   | 12                  |
| 0386-1091 | AH-24             | A-LH (3/8-24)   | 24                  |

#### Oxy/Acetylene Hose Sets - Uniweld



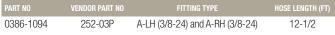
| PART NO | VENDOR PART NO | FITTING TYPE                     | HOSE LENGTH (FT) |
|---------|----------------|----------------------------------|------------------|
| 87-H32A | H32A           | A-I H (3/8-24) and A-RH (3/8-24) | 12-1/2           |





#### Oxy/Acetylene Hose Sets - TurboTorch







#### **TANK CARRYING STANDS**

# Tank Carrying Stand - One B Tank







# Tank Carrying Stand – One MC Tank & One R Tank

| PART NO | VENDOR PART NO | DESCRIPTION                                    |
|---------|----------------|--|
| 87-500S | 500S           | Tank Carrying Stand - One MC Tank & One R Tank |





# Tank Carrying Stand – One MC, PDC, or MDC Tank & One R Tank

| PART NO | VENDOR PART NO | DESCRIPTION   |
|---------|----------------|---|
| 87-511  | 511            | Tank Carrying Stand - One MC, PDC, or MDC Tank & One R Tank |





# Tank Carrying Stand – One 40/55 cu. ft. Nitrogen Tank or One 10 lb. CO2 Tank

|         |                |   | UNIV |
|---------|----------------|---|------|
| PART NO | VENDOR PART NO | DESCRIPTION   |      |
| 87-516  | 516            | Tank Carrying Stand - One 40/55 cu. ft. Nitrogen Tank or One 10 pound CO2 | Tank |





#### Tank Carrying Handle - One B Tank

| ank | Urbolorch |
|-----|-----------|
|     |           |





### **Tank Carrying Stand - One B Tank**



| PART NO   | VENDOR REF NO | DESCRIPTION                      |
|-----------|---------------|----------------------------------|
| 1421-0034 | TT-B          | Tank Carrying Stand - One B Tank |



#### **TANK CARRYING STANDS**

Tank Carrying Stand – One MC Tank & One R Tank



| rani no   | VENDOR REI NO | DESCRIF HOW                                    |
|-----------|---------------|--|
| 1421-0036 | TT-MCR        | Tank Carrying Stand - One MC Tank & One R Tank |



### **Tank Carrying Stand -**One MC Tank & One R Tank (Turbo Tote)

○ TurboTorch®

| PART NO   | VENDOR REF NO | DESCRIPTION   |
|-----------|---------------|---|
| 0386-1241 | _             | Tank Carrying Stand - One MC Tank & One R Tank (Turbo Tote) |



#### Tank Carrying Stand -One MC Tank or One MT-1 MAPP Tank

TurboTorch°

| PART NO   | VENDOR REF NO | DESCRIPTION   |
|-----------|---------------|---|
| 1421-0035 | TT-MC         | Tank Carrying Stand - One MC Tank or One MT-1 MAPP Tank |



#### 87-BG1 (BG1) Blow Gun



| PART NO | VENDOR PART NO | DESCRIPTION |
|---------|----------------|-------------|
| 87-BG1  | BG1            | Blow Gun    |



#### **Nitrogen Blow Gun Kits**

| 100 | _   |    | - | _ | <br>1. 6 |
|-----|-----|----|---|---|----------|
|     | Tu  | 46 |   | 0 | •        |
|     |     |    |   |   |          |
|     | ··· |    | • |   |          |

UNIWELD

| PART NO   | DESCRIPTION  |
|-----------|--|
| 0386-1234 | Nitrogen Purge & Blow Gun Kit - Fits 20 Cu. Ft. Tank Not Included (NPK-20) |
| 0386-1236 | Nitrogen Purge & Blow Gun Kit - Fits 40 Cu. Ft. Tank Not Included (NPK-40) |
| 0426-0009 | Nitrogen Purge & Blow Gun Kit - Includes 40 Cu. Ft. Tank (SKP-40T)         |



#### **Flint Lighters**

| PART NO   | VENDOR PART NO | DESCRIPTION                    | CASE QTY | CASE REQ |
|-----------|----------------|--------------------------------|----------|----------|
| 87-FL3437 | FL3437         | Flint Lighter w/5 Spare Flints | _        | _        |
| 87-FL34   | FL34           | Flint Lighter                  | 10       | Yes      |





#### Job Knob

Many acetylene tanks do not come with a mechanism to open the valve, only a metal shank. The Job Knob offers the user the ability to open and close the valve with ease without jeopardizing the integrity of the shank. It magnetically stays with the tank in use until the time of exchange, where it can easily slide onto the new tank valve.

- No more stripping the stem
- Fits large and small tanks
- Stays on magnetically 2 lb. draw from magnet
- Removable- easily slides onto new tank valve
- Temperature range: -50 to 400°F

CAUTION: Make sure valve stem is completely shut off and hoses are bled before storing tanks

| PART NO | DESCRIPTION  |
|---------|--------------|
| JOBKNOB | The Job Knob |

#### **SOLDERING IRONS & GUNS**



#### **Soldering Irons**

- Stainless steel barrel
- Lightweight heat and impact resistant pencil handle
- Power indicator light

| PART NO  | INPUT<br>Voltage (V) | OUTPUT (W) | TEMP RANGE<br>(°F) | LENGTH<br>(IN) |  |
|----------|----------------------|------------|--------------------|----------------|--|
| 87-SP23L | 120                  | 25         | 750                | 8-1/4          | Replaceable - Includes MT1 1/8 in. Nickel plated copper tip  |
| 87-SP40L | 120                  | 40         | 900                | 8-1/4          | Replaceable - Includes MT10 1/4 in. Nickel plated copper tip |



#### **Soldering Guns**

- Fingertip trigger selects high (1st position) or low output (2nd position)
- Efficient tin-plated copper tip
- Light illuminates work

| PART NO | VENDOR<br>Part no | INPUT<br>Voltage (V) | OUTPUT (W) | TEMP RANGE<br>(°F) |
|---------|-------------------|----------------------|------------|--------------------|
| 87-D550 | D550              | 120                  | 260/200    | 1100/900           |

# **VACUUM PUMPS & GAUGES**

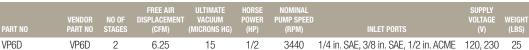
#### **VACUUM PUMPS**





Weller

Weller



#### **Vacuum Pumps – Single Stage**



|         |         |        | FREE AIR     | ULTIMATE     | HORSE | NOMINAL    |  | SUPPLY   |        |
|---------|---------|--------|--------------|--------------|-------|------------|--|----------|--------|
|         | VENDOR  | NO OF  | DISPLACEMENT | VACUUM       | POWER | PUMP SPEED |  | VOLTAGE  | WEIGHT |
| PART NO | PART NO | STAGES | (CFM)        | (MICRONS HG) | (HP)  | (RPM)      | INLET PORTS                            |          | (LBS)  |
| VP6S    | VP6S    | 1      | 5.85         | 100          | 1/3   | 1720       | 1/4 in. SAE, 3/8 in. SAE, 1/2 in. ACME | 120, 230 | 25     |



#### **Vacuum Pumps - Two Stage**



|              |                   |                 |                                   |                                    |                        |                                | _                                      | ~                        | ,               |
|--------------|-------------------|-----------------|-----------------------------------|------------------------------------|------------------------|--------------------------------|--|--------------------------|-----------------|
| PART NO      | VENDOR<br>Part no | NO OF<br>STAGES | FREE AIR<br>DISPLACEMENT<br>(CFM) | ULTIMATE<br>VACUUM<br>(MICRONS HG) | HORSE<br>POWER<br>(HP) | NOMINAL<br>PUMP SPEED<br>(RPM) | INLET PORTS                            | SUPPLY<br>VOLTAGE<br>(V) | WEIGHT<br>(LBS) |
| 87-90060     | 90060             | 2               | 1.5                               | 50                                 | 1/6                    | 3450                           | 1/4 in. SAE, 1/2 in. ACME              | 120                      | 12              |
| 90065        | 90065             | 2               | 5                                 | 25                                 | 1/3                    | 1725                           | 1/4 in. SAE, 3/8 in. SAE, 1/2 in. ACME | 120                      | 32              |
| 90066-2V-110 | 90066-2V-110      | 2               | 6                                 | 15                                 | 1/3                    | 3440                           | 1/4 in. SAE, 3/8 in. SAE, 1/2 in. ACME | 120                      | 25              |
| 90067        | 90067             | 2               | 7.5                               | 25                                 | 1/2                    | 1725                           | 1/4 in. SAE, 3/8 in. SAE, 1/2 in. ACME | 120                      | 34              |
| 90070-2V-110 | 90070-2V-110      | ) 2             | 10                                | 12                                 | 1/2                    | 3440                           | 1/4 in. SAE, 3/8 in. SAE, 1/2 in. ACME | 120                      | 33              |

# **VACUUM PUMPS & GAUGES**



#### **VACUUM GAUGES**

# 87-VG200 (VG200) Vacuum Gauge - Digital



Advanced measurement instrument provides continual digital readout of evacuation process on large five digit LCD. Measurement units are at the touch of a key. Advanced surface mount technology automatically compensates for ambient changes in the environment ensuring accuracy and consistency in performance. Advanced field-cleanable sensor is able to withstand 400 psi of positive pressure. Unit operates 30 hours on 9V alkaline battery with low battery indicator and auto-off feature.

| <ul> <li>Operating range to 0 microns Hg;</li> </ul> |    |
|--|----|
| accuracy +/- 10%; user selectable to read            | in |
| microns Hg, Torr, in/Hg or mbar                      |    |

- Self-heated thermistor bridge with integral temperature compensation from 32 to 122°F
- Standard 1/4 inch SAE connector with core depressor
- Includes carrying case, hanging hook, tee and 9V battery

| PART NO  | VENDOR PART NO | DESCRIPTION            |
|----------|----------------|------------------------|
| 87-VG200 | VG200          | Vacuum Gauge - Digital |



#### 87-VG100A (VG100A) Vacuum Gauge - LED

Compact self-contained instrument designed to

the evacuation process from start to finish. Nine

illuminate upon achieving industry standards for

proper system evacuations. Advanced surface

mount technology automatically compensates

accuracy and consistency in performance.

Advanced field-cleanable sensor is able to

withstand 400 psi of positive pressure. Unit

for ambient changes in the environment ensuring

provide constant indication and monitoring of

discrete high intensity LEDs are preset to

operates 25 hours on 9V alkaline battery



- Self-heated thermistor bridge with integral temperature compensation from 32 to 122°F
- Standard 1/4 inch SAE connector with core depressor
- Includes carrying case, hanging hook, tee and 9V battery

| PART NO   | VENDOR PART NO | DESCRIPTION        |
|-----------|----------------|--------------------|
| 87-VG100A | VG100A         | Vacuum Gauge - LED |

# REFRIGERANT RECOVERY SYSTEMS



# 87-CR500 (CR500) Refrigerant Recovery System

|   |   | S |
|---|---|---|
| _ | _ | _ |

| PART NO  | VENDOR<br>Part no | MAX RECOVERY RATE<br>DIRECT VAPOR<br>(LBS/MIN) | MAX RECOVERY RATE<br>DIRECT LIQUID<br>(LBS/MIN) | MAX RECOVERY RATE<br>PUSH-PULL LIQUID<br>(LBS/MIN) | MAXIMUM<br>Working<br>Pressure (PSI) | SUPPLY<br>Voltage (V) | HORSE<br>POWER<br>(HP) | WEIGHT<br>(LBS) |
|----------|-------------------|--|---|--|--------------------------------------|-----------------------|------------------------|-----------------|
| 87-CR500 | CR500             | 0.38   | 3   | 12.22  | 550                                  | 120                   | 1/3                    | 20              |



#### 87-CR700 (CR700) Refrigerant Recovery System

CDS

|     | PART NO  | VENDOR<br>Part no | MAX RECOVERY RATE<br>DIRECT VAPOR<br>(LBS/MIN) | MAX RECOVERY RATE<br>DIRECT LIQUID<br>(LBS/MIN) | MAX RECOVERY RATE<br>PUSH-PULL LIQUID<br>(LBS/MIN) | MAXIMUM<br>Working<br>Pressure (PSI) | SUPPLY<br>Voltage (V) | HORSE<br>POWER<br>(HP) | WEIGHT<br>(LBS) |
|-----|----------|-------------------|--|---|--|--------------------------------------|-----------------------|------------------------|-----------------|
| - 8 | 87-CR700 | CR700             | 1.60   | 10  | 20   | 550                                  | 120                   | 1                      | 34              |



#### **TR21 Refrigerant Recovery System**

CDS<sup>\*</sup>

| PART NO | VENDOR<br>Part no | MAX RECOVERY RATE<br>DIRECT VAPOR<br>(LBS/MIN) | MAX RECOVERY RATE<br>DIRECT LIQUID<br>(LBS/MIN) | MAX RECOVERY RATE<br>PUSH-PULL LIQUID<br>(LBS/MIN) | MAXIMUM<br>WORKING<br>PRESSURE (PSI) | SUPPLY<br>Voltage (V) | HORSE<br>POWER<br>(HP) | WEIGHT<br>(LBS) |
|---------|-------------------|--|---|--|--------------------------------------|-----------------------|------------------------|-----------------|
| TR21    | TR21              | 0.703  | 11.950  | 31.7   | 550                                  | 120                   | 3/4                    | 24.5            |

# **REFRIGERANT RECOVERY SYSTEMS**



#### MT69 Molecular Transformator - Recovery Tool



The effects of high ambient temperatures and elevated tank pressures on the recovery process are well known. As the temperature/pressure of the recovery cylinder increases, the speed of the recovery process decreases until it is finally halted by a high pressure shut down. The MT69 Molecular Transformator provides valuable assistance in the transformation of high temp/press vapor refrigerant into low temp/press liquid refrigerant,

dramatically improving recovery speed and efficiency. It is a patent pending "Innovation in Design" from CPS, intended for use with all commercially available brands of refrigerant recovery equipment. It is extremely easy to use, saves time and money and provides the missing link in high ambient performance that exists in all commercially available recovery machines on the market today.

| 00 |
|----|
|    |
|    |

MT69

# 69000 Refrigerant Recovery System



| PART NO | VENDOR<br>Part no | MAX RECOVERY RATE<br>DIRECT VAPOR<br>(LBS/MIN) | MAX RECOVERY RATE<br>DIRECT LIQUID<br>(LBS/MIN) | MAX RECOVERY RATE<br>PUSH-PULL LIQUID<br>(LBS/MIN) | MAXIMUM<br>Working<br>Pressure (PSI) | SUPPLY<br>Voltage (V) | HORSE<br>POWER<br>(HP) | WEIGHT<br>(LBS) |
|---------|-------------------|--|---|--|--------------------------------------|-----------------------|------------------------|-----------------|
| 69000   | 69000             | 0.75   | 2.50  | 12   | 500                                  | 120                   | 1/2                    | 38              |

Molecular Transformator - Recovery Tool



#### 69300 Refrigerant Recovery System



| PART NO | VENDOR<br>Part no | MAX RECOVERY RATE<br>DIRECT VAPOR<br>(LBS/MIN) | MAX RECOVERY RATE<br>DIRECT LIQUID<br>(LBS/MIN) | MAX RECOVERY RATE<br>PUSH-PULL LIQUID<br>(LBS/MIN) | MAXIMUM<br>Working<br>Pressure (PSI) | SUPPLY<br>Voltage (V) | HORSE<br>POWER<br>(HP) | WEIGHT<br>(LBS) |
|---------|-------------------|--|---|--|--------------------------------------|-----------------------|------------------------|-----------------|
| 69300   | 69300             | 0.70   | 7.7   | 20.2   | 500                                  | 120                   | 1/2                    | 28              |

# **CHARGING SCALES**



#### 87-CC800A (CC800A) Charging Scales - Programmable



- Programmable unit allows the user to input the desired charge amount
- Automatically shuts off refrigerant flow and
- sounds alarm when the specified charge amount is reached

| PART NO   | VENDOR PART NO | PROGRAMMABLE | CAPACITY (LBS) | ACCURACY (%) | RESOLUTION (OZ) | BATTERY   |
|-----------|----------------|--------------|----------------|--------------|-----------------|-----------|
| 87-CC800A | CC800A         | Yes          | 220            | 0.015        | +/- 0.25        | Two 9 VDC |



#### 87-CC220 (CC220) Charging Scales – Non-Programmable



**▼** Mastercool:

| PART NO  | VENDOR PART NO | PROGRAMMABLE | CAPACITY (LBS) | ACCURACY (%) | RESOLUTION (OZ) | BATTERY   |
|----------|----------------|--------------|----------------|--------------|-----------------|-----------|
| 87-CC220 | CC220          | No           | 220            | 0.015        | +/- 0.25        | Two 9 VDC |



#### 98210-A Charging Scales - Programmable

- Allows user to program desired quantities; before charge is complete, an alarm sounds allowing ample time to turn off supply
- Tank capacity programming feature allows user
- refrigerant in the tank at any time

to know the amount of

 Repeat feature allows user to charge previously stored amount

| PART NO | VENDOR PART NO | PROGRAMMABLE | CAPACITY (LBS) | ACCURACY (%) | RESOLUTION (OZ) | BATTERY   |
|---------|----------------|--------------|----------------|--------------|-----------------|-----------|
| 98210-A | 98210-A        | Yes          | 240            | 0.1          | +/- 0.32        | One 9 VDC |

# **CHARGING SCALES**



#### 98230 Charging Scale Solenoid Module for 928210 (928210-A) Mastercool.



This module turns the 98210 scales into automatic programmable scales by allowing the user to control the exact amount of refrigerant being transferred. Also allows pausing of refrigerant transfer. The compact design is battery powered (9V), lightweight, portable and works with all types of refrigerant. Includes a short hose for tank connection, USB cord and 1/4 inch SAE x 1/2 inch ACME adapter.

| PART NO | VENDOR PART NO | DESCRIPTION                    |
|---------|----------------|--------------------------------|
| 98230   | 98230          | Charging Scale Solenoid Module |



#### 98310 Charging Scale - Wireless - Programmable



**▼** Mastercool:

- Programmable unit allows the user to input the desired charge amount
- Alarm will sound before the specified charge

amount is reached, allowing sufficient time to manually turn-off refrigerant supply

Wireless feature prevents tangled wires

| PART NO | VENDOR PART NO | PROGRAMMABLE | CAPACITY (LBS) | ACCURACY (%) | RESOLUTION (OZ) | BATTERY           |  |
|---------|----------------|--------------|----------------|--------------|-----------------|-------------------|--|
| 98310   | 98310          | Yes          | 243            | 0.1          | 0.02            | 6- AA and 1-9 VDC |  |



#### 98315 Charging Scale - Wireless -**Programmable w/Solenoid Valve**

- Programmable unit allows the user to input the desired charge amount
- Automatically shuts off refrigerant flow and

sounds alarm when the specified charge amount is reached

Wireless feature prevents tangled wires

| PART NO | VENDOR PART NO | PROGRAMMABLE | CAPACITY (LBS) | ACCURACY (%) | RESOLUTION (OZ) | BATTERY          |
|---------|----------------|--------------|----------------|--------------|-----------------|------------------|
| 98315   | 98315          | Yes          | 243            | 0.1          | 0.02            | 6-AA and 1-9 VDC |

# REFRIGERANT SERVICE MANIFOLDS, GAUGES & HOSES



#### **SERVICE MANIFOLDS & GAUGES**



- Piston valves with triple-seal neoprene O-Ring design for enhanced sealing
- Backseating O-Ring seals the valve nut when fully open
- Floating nylon sealing disk

- Valve stems retract fully to provide maximum flow
- Mirror-like port finish for smooth valve movement

| PART NO   | VENDOR<br>Part no | REFRIGERANT SCALES   | PRESSURE<br>SCALES | TEMP<br>SCALES | MANIFOLD<br>Type | MANIFOLD<br>MATERIAL | HOSE TYPE                   | HOSE<br>Length (In) | GAUGE<br>DIA (IN) | GAUGE<br>Type | SIGHT<br>GLASS |
|-----------|-------------------|----------------------|--------------------|----------------|------------------|----------------------|-----------------------------|---------------------|-------------------|---------------|----------------|
| 87-MBD    | MBD               | R-22, R-134a, R-404A | psi                | F              | 2-Way            | Aluminum             | Hoses not included          | _                   | 2-1/2             | Dry           | _              |
| 87-MBHP5E | MBHP5E            | R-22, R-404A, R-410A | psi                | F              | 2-Way            | Aluminum             | Premium w/Ball Valves       | 5                   | 2-1/2             | Dry           | _              |
| 87-MBHP5  | MBHP5             | R-22, R-404A, R-410A | psi                | F              | 2-Way            | Aluminum             | Premium w/Standard Fittings | 5                   | 2-1/2             | Dry           | _              |
| 87-MBHP5A | 87-MBHP5A         | R-22, R-404A, R-410A | psi                | F              | 2-Way            | Aluminum             | AB w/Standard Fittings      | 5                   | 2-1/2             | Dry           | _              |

**BLACKMAX Aluminum Service Manifolds & Gauges** 



#### **VORTECH Aluminum Service Manifolds & Gauges**

Advanced VVS diaphragm valve system.

CDS

| PART NO  | VENDOR<br>Part no | REFRIGERANT SCALES   | PRESSURE<br>SCALES | TEMP<br>SCALES | MANIFOLD<br>Type | MANIFOLD<br>Material | HOSE TYPE          | HOSE<br>Length (In) | GAUGE<br>Dia (in) | GAUGE<br>Type | SIGHT<br>GLASS |
|----------|-------------------|----------------------|--------------------|----------------|------------------|----------------------|--------------------|---------------------|-------------------|---------------|----------------|
| 87-MV2D2 | MV2D2             | R-22, R-134a, R-404A | psi                | F              | 2-Way            | Aluminum             | Hoses not included | _                   | 3-1/8             | Dry           | Yes            |





#### **SERVICE MANIFOLDS & GAUGES**

#### **Brass Service Manifolds & Gauges**



| PART NO  | VENDOR<br>Part no | REFRIGERANT SCALES   | PRESSURE<br>SCALES | TEMP<br>SCALES | MANIFOLD<br>Type | MANIFOLD<br>Material | HOSE TYPE                    | HOSE<br>Length (In) | GAUGE<br>DIA (IN) | GAUGE<br>Type | SIGHT<br>GLASS |
|----------|-------------------|----------------------|--------------------|----------------|------------------|----------------------|------------------------------|---------------------|-------------------|---------------|----------------|
| 87-M6C   | M6C               | R-12, R-22, R-502    | psi                | F              | 2-Way            | Brass                | Hoses not included           | _                   | 2-1/2             | Dry           | _              |
| 87-M6CS3 | M6CS3             | R-12, R-22, R-502    | psi                | F              | 2-Way            | Brass                | Standard w/Standard Fittings | 3                   | 2-1/2             | Dry           | _              |
| 87-M6CS5 | M6CS5             | R-12, R-22, R-502    | psi                | F              | 2-Way            | Brass                | Standard w/Standard Fittings | 5                   | 2-1/2             | Dry           | _              |
| 87-M6D   | M6D               | R-22, R-134a, R-404A | psi                | F              | 2-Way            | Brass                | Hoses not included           | _                   | 2-1/2             | Dry           | _              |



#### **Workingman's Choice Manifold**



🕶 Mastercool: 🕷

- Piston valves with triple-seal neoprene O-Ring design for enhanced sealing
- Silicone dampened gauges smooth out needle movement

| PART NO  | VENDOR<br>Part no | REFRIGERANT SCALES           | PRESSURE<br>SCALES | TEMP<br>SCALES | MANIFOLD<br>Type | MANIFOLD<br>Material  | HOSE TYPE | HOSE<br>Length (In) | GAUGE<br>Dia (in) | GAUGE<br>Type | SIGHT<br>GLASS |
|----------|-------------------|------------------------------|--------------------|----------------|------------------|-----------------------|-----------|---------------------|-------------------|---------------|----------------|
| MT2H7P5E | MT2H7P5E          | R-134a, R-22, R-404A, R-410A | psi                | 2-Way          | Aluminum         | Premium w/Ball Valves | 5         | 3-1/8               | Dry               | No            | F              |



#### **Digitial Aluminum Service Manifolds & Gauges**

Large easy to read LCD displays pressures, saturated temperatures, actual temperatures, superheat and subcooling temperatures for over 60 refrigerants. When used with the clamp-on thermocouple connector, it will display the actual temperature and automatically calculates the

superheat or subcool temperature. When the vacuum sensor cable is attached to the manifold it will display deep vacuum. To ensure lasting performance and durability, the manifold case is constructed of ABS material and protected by a rugged rubber boot.

| PART NO | VENDOR<br>Part no | REFRIGERANT SCALES                | PRESSURE<br>SCALES                  | TEMP<br>Scales | MANIFOLD<br>Type | MANIFOLD<br>Material | HOSE TYPE   | HOSE<br>Length (In) | GAUGE<br>DIA (IN) | GAUGE<br>Type | SIGHT<br>GLASS |
|---------|-------------------|-----------------------------------|-------------------------------------|----------------|------------------|----------------------|---|---------------------|-------------------|---------------|----------------|
| 99961   | 99961             | For use with over 60 refrigerants | psi, in. Hg, Bar,<br>MPa, kg/sq. cm | ,              | 4-Way            | Aluminum<br>Senso    | Manifold, Hoses, Vacuum Hose, Vacuum<br>r, Thermocouple, Data logger CD, USB Ca |                     | _                 | Digital       | Yes            |
| 99661-A | 99661-A           | All                               | psi, in. Hg, Bar,<br>MPa, kg/sq. cm | F              | 2-Way            | Aluminum             | Manifold, Standard Hoses,<br>Vacuum Sensor, Thermocouple, Cas                   | 5<br>e              | _                 | Digital       | Yes            |
| 99103   | 99103             | All                               | psi, in. Hg, Bar,<br>MPa. kg/sg, cm | F              | 2-Way            | Aluminum             | Manifold only   |                     | _                 | Digital       | Yes            |



#### Aluminum Ball Valve Service Manifold & Gauges (3-Way)



**→** Mastercool<u>°</u>

- Stainless steel ball valve design controls flow smoothly and quickly with only a quarter turn
- Silicone dampened gauges smooth out needle movement

| PART NO | VENDOR<br>Part no | REFRIGERANT SCALES   | PRESSURE<br>SCALES | TEMP<br>SCALES | MANIFOLD<br>Type | MANIFOLD<br>Material | HOSE TYPE             | HOSE<br>Length (In) | GAUGE<br>DIA (IN) | GAUGE<br>Type | SIGHT<br>GLASS |
|---------|-------------------|----------------------|--------------------|----------------|------------------|----------------------|-----------------------|---------------------|-------------------|---------------|----------------|
| 59861   | 59861             | R-22, R-404A, R-410A | psi                | F              | 3-Way            | Aluminum             | Premium w/Ball Valves | 5                   | 3-1/8             | Dry           | Yes            |



#### **Aluminum Service Manifolds & Gauges**

• Free-floating piston type valves reduce O-Ring wear

• Silicone dampened gauges smooth out needle movement

| PART NO | VENDOR<br>PART NO | REFRIGERANT SCALES | PRESSURE<br>SCALES | TEMP<br>SCALES | MANIFOLD<br>Type | MANIFOLD<br>Material | HOSE TYPE                      | HOSE<br>Length (IN) | GAUGE<br>DIA (IN) | GAUGE<br>Type | SIGHT<br>GLASS |
|---------|-------------------|--------------------|--------------------|----------------|------------------|----------------------|--------------------------------|---------------------|-------------------|---------------|----------------|
| 95661   | 95661             | R-12, R-22, R-502  | psi                | F              | 2-Way            | Aluminum             | Standard w/Anti-Blowback Fitti | ngs 5               | 2-1/2             | Dry           | Yes            |
| 57161   | 57161             | R-22 R-4044 R-4104 | nei                | F              | 2-May            | Δluminum             | Premium w/Standard Fittings    | 5                   | 3-1/8             | Dny           | Vac            |



#### **SERVICE MANIFOLDS & GAUGES**

#### **Brass Service Manifolds & Gauges**



| PART NO  | VENDOR<br>Part no | REFRIGERANT SCALES   | PRESSURE<br>SCALES | TEMP<br>SCALES | MANIFOLD<br>Type | MANIFOLD<br>Material | HOSE TYPE                    | HOSE<br>Length (In) | GAUGE<br>Dia (in) | GAUGE<br>Type | SIGHT<br>GLASS |
|----------|-------------------|----------------------|--------------------|----------------|------------------|----------------------|------------------------------|---------------------|-------------------|---------------|----------------|
| 87-33636 | 33636             | R-12, R-22, R-502    | psi                | F              | 2-Way            | Brass                | Standard w/Standard Fittings | 3                   | 2-1/2             | Dry           | No             |
| 33661    | 33661             | R-12, R-22, R-502    | psi                | F              | 2-Way            | Brass                | Standard w/Standard Fittings | 5                   | 2-1/2             | Dry           | No             |
| 59261    | 59261             | R-22, R-404A, R-410A | psi                | F              | 2-Way            | Brass                | Premium w/Ball Valves        | 5                   | 3-1/8             | Dry           | No             |
| 59161    | 59161             | R-22, R-404A, R-410A | psi                | F              | 2-Way            | Brass                | Premium w/Standard Fittings  | 5                   | 3-1/8             | Dry           | No             |

#### **REFRIGERANT GAUGES**



#### **Refrigerant Gauges - CPS**



| PART NO | VENDOR<br>PART NO | REFRIGERANT SCALES   | PRESSURE<br>SCALES | FITTING<br>Size (IN) | GAUGE<br>Dia (in) | GAUGE<br>Type | GAUGE<br>USAGE | TEMP<br>Scales |
|---------|-------------------|----------------------|--------------------|----------------------|-------------------|---------------|----------------|----------------|
| 87-RGCH | RGCH              | R-12, R-22, R-502    | psi                | 1/8 NPT              | 2-1/2             | Dry           | High Side      | F              |
| 87-RGHH | RGHH              | R-22, R-404A, R-410A | psi                | 1/8 NPT              | 2-1/2             | Dry           | High Side      | F              |
| 87-RGCL | RGCL              | R-12, R-22, R-502    | psi                | 1/8 NPT              | 2-1/2             | Dry           | Low Side       | F              |
| 87-RGHL | RGHL              | R-22, R-404A, R-410A | psi                | 1/8 NPT              | 2-1/2             | Dry           | Low Side       | F              |



#### **Refrigerant Gauges – Mastercool**



**▼** Mastercool:

| PART NO | VENDOR<br>Part no | REFRIGERANT SCALES   | PRESSURE<br>SCALES | FITTING<br>Size (IN) | GAUGE<br>DIA (IN) | GAUGE<br>Type | GAUGE<br>USAGE | TEMP<br>SCALES |
|---------|-------------------|----------------------|--------------------|----------------------|-------------------|---------------|----------------|----------------|
| 91500   | 91500             | R-12, R-22, R-502    | psi                | 1/8 NPT              | 3-1/8             | Dry           | High Side      | F              |
| 58803   | 58803             | R-22, R-404A, R-410A | psi                | 1/8 NPT              | 3-1/8             | Dry           | High Side      | F              |
| 91250   | 91250             | R-12, R-22, R-502    | psi                | 1/8 NPT              | 3-1/8             | Dry           | Low Side       | F              |
| 58501   | 58501             | R-22, R-404A, R-410A | psi                | 1/8 NPT              | 3-1/8             | Dry           | Low Side       | F              |



#### **Gauge Protector Set**

- Unique ribbing deadens bumps and deflects shocks
- Fits 3-1/8 inch diameter gauges

| PART NO | VENDOR PART NO | DESCRIPTION  |
|---------|----------------|--|
| 91553   | 91553          | Gauge Protector Set - Red & Blue (For 3-1/8 in. diameter gauges) |

#### **REFRIGERANT CHARGING HOSES**



#### **Refrigerant Charging Hoses – Standard Fittings**



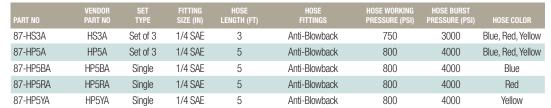
CDS

| PART NO | VENDOR<br>Part no | SET<br>TYPE | FITTING<br>Size (IN) | HOSE<br>Length (FT) | HOSE<br>Fittings | HOSE WORKING<br>PRESSURE (PSI) | HOSE BURST<br>PRESSURE (PSI) | HOSE COLOR        |
|---------|-------------------|-------------|----------------------|---------------------|------------------|--------------------------------|------------------------------|-------------------|
| 87-HS4  | HS4               | Set of 3    | 1/4 SAE              | 4                   | Standard         | 750                            | 3000                         | Blue, Red, Yellow |
| 87-HP5  | HP5               | Set of 3    | 1/4 SAE              | 5                   | Standard         | 800                            | 4000                         | Blue, Red, Yellow |



#### **Refrigerant Charging Hoses – Anti-Blowback Fittings**

Automatic sealing valve eliminates refrigerant loss and blowback.





#### **REFRIGERANT CHARGING HOSES**

### **Refrigerant Charging Hoses with Ball Valves**



| PART NO | VENDOR<br>Part no | SET<br>TYPE | FITTING<br>Size (IN) | HOSE<br>Length (FT) | HOSE<br>Fittings               | HOSE WORKING<br>PRESSURE (PSI) | HOSE BURST<br>PRESSURE (PSI) | HOSE COLOR        |
|---------|-------------------|-------------|----------------------|---------------------|--------------------------------|--------------------------------|------------------------------|-------------------|
| 87-HS3E | HS3E              | Set of 3    | 1/4 SAE              | 3                   | Standard (Includes Ball Valve) | 750                            | 3000                         | Blue, Red, Yellow |
| 87-HP6L | HP6L              | Set of 3    | 1/4 SAE              | 6                   | Standard (Includes Ball Valve) | 800                            | 4000                         | Blue, Red, Yellow |



### Refrigerant Hose Extensions with Ball Valves



| PART NO  | VENDOR<br>Part no | SET<br>Type | FITTING<br>Size (IN) | HOSE<br>Length (FT) | HOSE<br>Fittings | HOSE WORKING<br>PRESSURE (PSI) | HOSE BURST<br>PRESSURE (PSI) | HOSE COLOR        |
|----------|-------------------|-------------|----------------------|---------------------|------------------|--------------------------------|------------------------------|-------------------|
| 87-HT1E  | HT1E              | Set of 3    | 1/4 SAE              | _                   | 45 degree        | 800                            | 4000                         | Blue, Red, Yellow |
| 87-HT1RE | HT1RE             | Single      | 1/4 SAE              | _                   | 45 degree        | 800                            | 4000                         | Red               |
| 87-HT1YE | HT1YE             | Single      | 1/4 SAE              | _                   | 45 degree        | 800                            | 4000                         | Yellow            |



### **Replacement Hose Gaskets**

CDS\*

Fits 1/4 in. SAE Flare, 1/2 in. ACME, and 1/2-20 UNF hose fittings on end without depressor

| PART NO | VENDOR PART NO | DESCRIPTION                         |
|---------|----------------|-------------------------------------|
| 87-HXG  | HXG            | Replacement Hose Gasket (Box of 10) |



### **Refrigerant Charging Hoses – Standard Fittings**



| PART NO | VENDOR<br>Part no | SET<br>TYPE | FITTING<br>SIZE (IN) | HOSE<br>Length (FT) | HOSE<br>Fittings | HOSE WORKING<br>Pressure (PSI) | HOSE BURST<br>PRESSURE (PSI) | HOSE COLOR        |
|---------|-------------------|-------------|----------------------|---------------------|------------------|--------------------------------|------------------------------|-------------------|
| 40336   | 40336             | Set of 3    | 1/4 SAE              | 3                   | Standard         | 750                            | 3000                         | Blue, Red, Yellow |
| 40360   | 40360             | Set of 3    | 1/4 SAE              | 5                   | Standard         | 750                            | 3000                         | Blue, Red, Yellow |
| 40372   | 40372             | Set of 3    | 1/4 SAE              | 6                   | Standard         | 750                            | 3000                         | Blue, Red, Yellow |
| 48604   | 48604             | Single      | 3/8 SAE              | 5                   | Standard         | 800                            | 4000                         | Black             |
| 41601   | 41601             | Single      | 1/4 SAE              | 5                   | Standard         | 750                            | 3000                         | Blue              |
| 41603   | 41603             | Single      | 1/4 SAE              | 5                   | Standard         | 750                            | 3000                         | Red               |
| 41602   | 41602             | Single      | 1/4 SAE              | 5                   | Standard         | 750                            | 3000                         | Yellow            |



#### Refrigerant Charging Hoses – Anti-Blowback Fittings



Automatic sealing valve eliminates refrigerant loss and blowback.

| PART NO | VENDOR<br>Part no | SET<br>Type | FITTING<br>SIZE (IN) | HOSE<br>LENGTH (FT) | HOSE<br>Fittings | HOSE WORKING<br>PRESSURE (PSI) | HOSE BURST<br>PRESSURE (PSI) | HOSE COLOR        |
|---------|-------------------|-------------|----------------------|---------------------|------------------|--------------------------------|------------------------------|-------------------|
| 45360   | 45360             | Set of 3    | 1/4 SAE              | 5                   | Anti-Blowback    | 750                            | 3000                         | Blue, Red, Yellow |
| 46360   | 46360             | Set of 3    | 1/4 SAE              | 5                   | Anti-Blowback    | 800                            | 4000                         | Blue, Red, Yellow |
| 45601   | 45601             | Single      | 1/4 SAE              | 5                   | Anti-Blowback    | 750                            | 3000                         | Blue              |
| 45603   | 45603             | Single      | 1/4 SAE              | 5                   | Anti-Blowback    | 750                            | 3000                         | Red               |
| 45602   | 45602             | Single      | 1/4 SAE              | 5                   | Anti-Blowback    | 750                            | 3000                         | Yellow            |



### Refrigerant Hose Extensions with Ball Valves



| PART NO | VENDOR<br>Part no | SET<br>Type | FITTING<br>Size (IN) | HOSE<br>Length (FT) | HOSE<br>Fittings | HOSE WORKING<br>Pressure (PSI) | HOSE BURST<br>PRESSURE (PSI) | HOSE COLOR        |
|---------|-------------------|-------------|----------------------|---------------------|------------------|--------------------------------|------------------------------|-------------------|
| 90262   | 90262             | Set of 3    | 1/4 SAE              | _                   | Straight         | 750                            | 3000                         | Blue, Red, Yellow |
| 90263-R | 90263-R           | Single      | 1/4 SAE              | _                   | 45 degree        | 750                            | 3000                         | Blue              |
| 90265-R | 90265-R           | Single      | 1/4 SAE              | _                   | 45 degree        | 750                            | 3000                         | Red               |
| 90264-R | 90264-R           | Single      | 1/4 SAE              | _                   | 45 degree        | 750                            | 3000                         | Yellow            |

#### **REFRIGERANT HOSE ADAPTERS & FITTINGS**



#### **MICROSEAL Anti-Blowback Valves**

CDS

Automatic sealing valve eliminates refrigerant loss and blowback.

| PART NO    | VENDOR PART NO | DESCRIPTION   |
|------------|----------------|---|
| 87-AB3-3PK | AB3-3PK        | MICROSEAL Anti-Blowback Valve - 1/4 in. SAE Male x 1/4 in. (SAE Female) - Pack of 3 |



#### Ball Valves - 1/4 in. SAE (Male x Female)

CDS<sup>®</sup>

| PART NO    | VENDOR PART NO | DESCRIPTION  |  |
|------------|----------------|--|--|
| 87-BV3-3PK | BV3            | Ball Valve - 1/4 in. SAE (Male x Female) - Pack of 3 |  |



#### Adapter - 1/2-20 UNF Female x 1/4 SAE Male (w/Core & Depressor)

CDS

| PART NO | VENDOR PART NO | DESCRIPTION   |
|---------|----------------|---|
| 87-AD87 | AD87           | Adapter - 1/2-20 UNF Female x 1/4 SAE Male (w/Core & Depressor) |



# Adapters – 1/4 in. SAE x Automotive Quick Connect (R-134a)



| PART NO | VENDOR PART NO | DESCRIPTION   |
|---------|----------------|---|
| 66434R  | 66434R         | Adapter - 1/4 in. SAE x 16 mm Automotive Quick Connect Coupler (R-134a - High Side) |
| 66534R  | 66534R         | Adapter - 1/4 in. SAE x 13 mm Automotive Quick Connect Coupler (R-134a - Low Side)  |



#### **Brass Fitting for Service Manifold**

CDS\*

1/8" NPT fitting threads into manifold; includes two 1/4" SAE flare connections one open for refrigerant hose connection, and one closed for spare hose.

| PART NO | VENDOR PART NO | DESCRIPTION                        |
|---------|----------------|------------------------------------|
| 40-397  | 40-397         | Brass Fitting for Service Manifold |



#### **Hose Anchor Bracket for Service Manifold**

CDS<sup>\*</sup>

Mounts to manifold for spare hose storage; includes three 1/4" SAE fittings and one 3/8" SAE fitting.

| PART NO  | VENDOR PART NO | DESCRIPTION               |  |
|----------|----------------|---------------------------|--|
| 87-M4XHA | M4XHA          | 4-Way Hose Anchor Bracket |  |

# **HVAC INSTRUMENTS, METERS & DETECTORS**





#### **SMART DEVICE HVAC TOOLS & INSTRUMENTS**

#### SPM-K1 - Dual Port Manometer Kit



Combines the convenience of the SPM-100 meter and PRB-KIT probe kit. Includes:

- SPM-100 dual port smartphone manometer
- Two stainless steel static pressure probes with magnetic color coded bases
- Two 6 ft. lengths of rugged latex tubing
- Brass barbed fitting for taking gas readings
- New ergonomic carrying case with improved cord management system

| PART NO | DESCRIPTION                                       |
|---------|---|
| SPM-K1  | Wireless Smartphone Manometer and Probe Kit Combo |



#### **SMART DEVICE HVAC TOOLS & INSTRUMENTS**



#### SPM-100 - Dual Port Manometer

Utilizes onscreen guidance in the app to make it easy to take accurate pressure readings. The user is shown where to place the color coded static pressure probes (sold separately) and how to take measurements. Measures:

Smartphone Static Pressure Meter



- Static and total external static pressure
- Pressure differential
- Indoor vs. Outdoor conditions
- Weather data
- Stores and sends reports

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#### PRB-KIT - Dual Port Manometer

DESCRIPTION

- Pressure probe kit for the SPM-100:
- Contains two stainless steel static probes, with two color coded magnetic handles
- Two 6 ft, sections of rubber tubing
- Ergonomic carrying case



PRB-KIT Airflow Probe Kit

SPM-100

#### **Tempsmart Temperature and Humidity Data Logger**



Small enough to fit on a key-chain, yet one of the most powerful and accurate instruments of its kind. Connects to Apple and Android smartphones, tablets, and smart watches via Bluetooth.

- Solid state EEPROM memory chip, stores 20,000 dry bulb temperature and relative humidity readings
- Used with complimentary app which assists user through taking tests with onscreen guidance including;
- Dry and wet bulb temperature
- Feels like temperature
- Dew point
- Relative humidity
- Readings are uploaded each time the meter is connected to your smartphone or tablet
- First-in/First-out log so that the most current readings are always available
- Meter can be deployed with custom names to identify the location



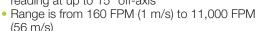
TS-100 Tempsmart Temperature and Humidity Data Logger

#### **ABM-100 Airflow Balancing Meter**



- Compatible with iOS, all major Android devices
- Measures airflow in:
- Linear feet per minute
- Cubic feet per minute
- Cubic meters per hour
- Linear meters per second

• Accurate to +/- 0.5% of the reading at up to 15° off-axis



- Resolution is .19 FPM (0.001 m/s)
- Rugged and eco-friendly packaging that serves as a reusable storage case
- Sends onsite professional reports by email



# **ABM-200 Wireless Airflow Balancing Meter**



Includes all of the features and functions of the ABM-100, plus it measures temperature, humidity, and pressure to provide:

- Dry and wet bulb temperature
- Feels like temperature
- Relative humidity

- Dew point
- Barometric pressure
- Air density
- Wind speed/direction/gusts
- Stores and sends reports
- Wireless for hands-free operation



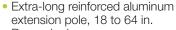
Wireless Airflow Balancing Meter ABM-200

#### **SMART DEVICE HVAC TOOLS & INSTRUMENTS**

### **EXP-64 Extension Pole**



- Take measurements without going up a ladder
- 1/4-20 thread universal mount



Rugged grip





- For use with ABM-200
- Collapsible 6 to 8 in. tripod

| PART NO | DESCRIPTION |
|---------|-------------|
| TRI-MIN | Mini-Tripod |



#### **Smart Service Tool Kit**

Lightweight wireless sensors that conveniently syncs with a mobile app, enabling the reading system's real-time pressure and temperature without using hoses or manifold gauges

- Two wireless low and high pressure sensors
- Two wireless temperature sensor clamps for quick and easy installation
- Pressures and temperatures displayed directly on your mobile device via free app

- 1/4-20 thread universal mount
- Vertical or horizontal mount position with lock
- Automatically calculates superheat and subcooling
- Monitor, record and export data via .csv
- Psig/bar pressure display; Fahrenheit or Celsius temperature display
- Diagnostic tools function remotely, enabling service personnel to be in another part of the building and still read and record data



# Zebra-Stat - Analyzer, Remote Control, Multi-Mode Tester

A fully electronic, easy-to-use diagnostic tool for HVAC technicians. Quickly diagnoses low-voltage control problems in system wiring, control boards, thermostats and associated components. Bright LED's positively indicate status.

• Performs immediate continuity checks on up to six circuits at a time

- Acts as a remote control, saving you steps from attic, roof, or basement
- Displays signal levels on control lines
- Monitors voltage levels (OK/Questionable/Low)
- · Acts as an automatic resetting circuit breaker, temporarily replacing a system fuse while looking for shorted lines or components

| PART NO | VENDOR PART NO | DESCRIPTION   |
|---------|----------------|---|
| 7S-2    | 7S-2           | Zebra-Stat - Analyzer/Remote Control/Multimode Tester |

#### **ELECTRONIC REFRIGERANT LEAK DETECTORS**

#### LS1 Electronic Leak Detector (Leak Seeker 1)

- Three sensitivity ranges
- Detects all CFC, HCFC and HFC refrigerants
- Min. leak rate detection capability: 1/10 oz./yr.
- Bar graph indicator measures leak concentration
- 15 inch long cable probe



#### LS2 Electronic Leak Detector (Leak Seeker 2)

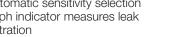
- Six sensitivity ranges automatically selected by the instrument
- Detects all CFC, HCFC and HFC refrigerants
- Min. leak rate detection capability: 1/10 oz./yr.
- Fully automatic sensitivity selection
- Bar graph indicator measures leak concentration
- 15 inch long cable probe

| PART NO | VENDOR PART NO | DESCRIPTION                               |
|---------|----------------|---|
| LS2     | LS2            | Electronic Leak Detector (Leak-Seeker II) |









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#### **ELECTRONIC REFRIGERANT LEAK DETECTORS**

# 87-LS790B (LS790B) Electronic Leak Detector (Leak Seeker)





- Ten sensitivity ranges
- Detects all CFC, HCFC and HFC refrigerants
- Min. leak rate detection capability: 1/4 oz./year
- Bar graph display measures leak concentration
- 18 inch long cable probe

| PART NO   | VENDOR PART NO | DESCRIPTION                            |
|-----------|----------------|--|
| 87-LS790B | LS790B         | Electronic Leak Detector (Leak-Seeker) |



#### LS3000B Electronic Leak Detector (Eliminator)



- Uses two displays; one to pinpoint the leak, the other quantifies the size
- Detects all CFC, HCFC and HFC refrigerants
- 14 inch long cable probe
- Min. leak rate detection capability: 1/10 oz./year
- Bar graph display measures leak concentration

| PART NO | VENDOR PART NO | DESCRIPTION                           |
|---------|----------------|---------------------------------------|
| LS3000B | LS3000B        | Electronic Leak Detector (Eliminator) |



#### 55100 Electronic Leak Detector

- Three sensitivity ranges
- Detects all CFC, HCFC and HFC refrigerants
- Min. leak rate detection capability: 1/10 oz./year

| D vioual indicator | Mastercool "World Class Quality" |
|--------------------|----------------------------------|
| D visual indicator |                                  |

- LED visual indicator
- 16 inch long cable probe
- Includes a custom molded carrying case

| PART NO | VENDOR PART NO | DESCRIPTION              |
|---------|----------------|--------------------------|
| 55100   | 55100          | Electronic Leak Detector |

#### **ELECTRONIC/UV REFRIGERANT LEAK DETECTORS**



#### 55200 Electronic/UV Leak Detector Kit

- Combines electronic and UV leak detection in one tool
- Six sensitivity ranges
- Detects all CFC, HCFC and HFC refrigerants
- LED visual indicator
- Min. leak rate detection capability: 1/10 oz./year
- 16 inch long cable probe
- Includes a custom molded carrying case

| PART NO | VENDOR PART NO | DESCRIPTION                     |
|---------|----------------|---------------------------------|
| 55200   | 55200          | Electronic/UV Leak Detector Kit |



### 55300 Electronic/UV Leak Detector with Cartridge Type Dye Injector

Same as 55200 except includes cartridge type dye injector.

| PART NO | VENDOR PART NO | DESCRIPTION  |
|---------|----------------|--|
| 55300   | 55300          | Electronic/UV Leak Detector Kit with Cartridge Type Dye Injector |



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**▼** Mastercool:

# REPLACEMENT SENSORS FOR REFRIGERANT LEAK DETECTORS







| PART NO | VENDOR PART NO | DESCRIPTION                                    |
|---------|----------------|--|
| 87-LSXS | LSXS           | Replacement Sensor for 87-LS780B and 87-LS790B |



#### Replacement Sensor for 87-LS3000 & LS3000B



| PART NO  | VENDOR PART NO | DESCRIPTION                                |  |
|----------|----------------|--|--|
| 87-LSXS3 | LSXS3          | Replacement Sensor for 87-LS3000 & LS3000B |  |



### Replacement Sensor for 55100 and 55200



| PART NO   | VENDOR PART NO | DESCRIPTION                            |
|-----------|----------------|--|
| 55100-SEN | 55100-SEN      | Replacement Sensor for 55100 and 55200 |



#### 875026 (0632 3170) Electronic Flue Gas Spillage Detector (317)



Gives off a visible and audible alarm when heating flue gases are detected. Flexible 8 inch probe for inaccessible locations.

| PART NO | VENDOR PART NO | DESCRIPTION                                 |
|---------|----------------|---|
| 875026  | 0632 3170      | Electronic Flue Gas Spillage Detector (317) |



#### 875036 (0632 3173) CO Monitor (317-3)



- Detect the presence of carbon monoxide (CO) in ambient air and warns user with both visual and audible alarm
- Reaction time of 40 seconds

- Detection range 0 to 1,999 ppm; resolution 1 ppm
- Includes carrying pouch and earphone

| PART NO | VENDOR PART NO | DESCRIPTION        |
|---------|----------------|--------------------|
| 875036  | 0632 3173      | CO Monitor (317-3) |



#### 87-AM50 (AM50) Air Velocity/Temperature Meter



- Precision vane-type anemometer provides fast, accurate air velocity measurements
- Airflow ranges from 0 to 8800 ft./min; temperature range from 32 to 122°F
- Airflow scales in ft./min., m/s, km/hr. and knots
- Includes laminated conversion chart to quickly calculate CFM from air velocity measurements
- Includes Type K thermocouple port

| PART NO | VENDOR PART NO | DESCRIPTION                    |
|---------|----------------|--------------------------------|
| 87-AM50 | AM50           | Air Velocity/Temperature Meter |



#### **TESTO POCKET METERS**



# 875043 (0560 0610) Pocket Air Velocity, Temperature, Humidity Meter (410-2)



 Airflow ranges from 80 to 4000 ft./min; temperature range 14 to 122°F; humidity range 0 to 100% RH  Measures air velocity, temperature, relative humidity, wet bulb temperature and dew point

|                            | CORN /IDO | noulch    |
|----------------------------|-----------|-----------|
| <ul><li>Includes</li></ul> | Carryina  | LICILICIT |
|                            |           |           |

| PART NO | VENDOR PART NO | DESCRIPTION  |
|---------|----------------|--|
| 875043  | 0560 4102      | Pocket Air Velocity/Temperature/Humidity Meter (410-2) |



#### 875044 (0560 0510) Pocket Digital Manometer (510)

- Pressure range to 44.15 in. W.C.
- Scales in Pa, hPa, mBar, mm W.C., in. W.C, mm Hg, in. Hg and psi

Measures temperature and relative humidity

Simultaneously measures temperatures using

Temperature range 14 to 122°F; humidity

range 0 to 100% RH

both IR and ambient air

• Easy to use one button operation

| • Includes magnet for mounting | during |
|--------------------------------|--------|
| measurements                   |        |





| PART NO | VENDOR PART NO | DESCRIPTION                    |
|---------|----------------|--------------------------------|
| 875044  | 0560 0510      | Pocket Digital Manometer (510) |
|         |                |                                |
|         |                |                                |
|         |                |                                |



### 875042 (0560 0610) Pocket Temperature, Humidity Meter (610)

- Humidity scales in %RH and wet bulb
- Includes carrying pouch



| PART NO | VENDOR PART NO | DESCRIPTION                             |
|---------|----------------|---|
| 875042  | 0560 0610      | Pocket Temperature/Humidity Meter (610) |



#### 875041 (0560 0810) Pocket Temperature Meter (810)

- Temperature range -58 to 660°F
- Includes carrying pouch



| PART NO | VENDOR PART NO | DESCRIPTION                    |  |
|---------|----------------|--------------------------------|--|
| 875041  | 0560 0810      | Pocket Temperature Meter (810) |  |



#### **52245 Digital Pressure/Temperature Chart**

- Mastercool World Class Quality"
- Pocket sized device offers fast and accurate temperature references on a large easy to read LCD display
- Includes charts for sixty refrigerants
  Pressure charts in psi, Bar and MPa; temperature in F and C

| PART NO | VENDOR PART NO | DESCRIPTION                        |
|---------|----------------|------------------------------------|
| 52245   | 52245          | Digital Pressure/Temperature Chart |

# **VALVE CORE & SUPERHEAT MEASUREMENT TOOLS**



#### **SUPERHEAT MEASUREMENT SETS**

#### 83-CD3970-1PK (CD3970) Superheat Measurement Kit

Combines a core removal tool and thermometer to create a reliable and accurate way to measure superheat; allows temperature probe to directly measure refrigerant temperature.

| PART NO       | VENDOR PART NO | DESCRIPTION               |
|---------------|----------------|---------------------------|
| 83-CD3970-1PK | CD3970         | Superheat Measurement Kit |



#### 91499 Superheat Measurement Kit

Combines a core removal tool and thermometer to create a reliable and accurate way to measure superheat; allows temperature probe to directly measure refrigerant temperature.

| PART NO | VENDOR PART NO | DESCRIPTION               |  |
|---------|----------------|---------------------------|--|
| 91499   | 91499          | Superheat Measurement Kit |  |



#### **VALVE CORE REMOVAL TOOLS**

#### 83-CD3930-1PK (CD3930) Valve Core Removal Tool

- Permits valve core replacement with minimal refrigerant loss
- Uses a reliable 1/4 turn ball valve design to shut-off and control refrigerant flow
- Connects to any 1/4 inch SAE male flare
- PART NO VENDOR PART NO DESCRIPTION
  83-CD3930-1PK CD3930 Valve Core Removal Tool



#### 83-CD3900-1PK (CD3900) Valve Core Removal Tool

- Permits valve core replacement with minimal refrigerant loss
- Connects to any 1/4 inch SAE male flare
- service port

service port

measurement

 Uses a neoprene sleeve seal to shut-off and control refrigerant flow

Includes a 1/4 inch SAE male flare service port

to allow refrigerant recovery or recharge,

system evacuation and system pressure

| PART NO       | VENDOR PART NO | DESCRIPTION             |
|---------------|----------------|-------------------------|
| 83-CD3900-1PK | CD3900         | Valve Core Removal Tool |



#### 91490 Valve Core Removal Tool

- Permits valve core replacement with minimal refrigerant loss
- Connects to any 1/4 inch SAE male flare

service port

 Uses a reliable 1/4 turn ball valve design to shut-off and control refrigerant flow

| PART NO | VENDOR PART NO | DESCRIPTION             |  |
|---------|----------------|-------------------------|--|
| 91490   | 91490          | Valve Core Removal Tool |  |



#### 91496 Valve Core Removal Tool

- Permits valve core replacement with minimal refrigerant loss
- Uses a reliable 1/4 turn ball valve design to shut-off and control refrigerant flow
- Connects to any 1/4 inch SAE male flare

service port

 Includes a 1/4 inch SAE male flare service port to allow refrigerant recovery or recharge, system evacuation and system pressure measurement

| PART NO | VENDOR PART NO | DESCRIPTION             |
|---------|----------------|-------------------------|
| 91496   | 91496          | Valve Core Removal Tool |



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### **SOLENOID TEST MAGNET**



#### **Solenoid Test Magnet**

- Manually opens solenoid valves for troubleshooting, service repairs and maintenance
- Magnetically lifts plunger

PD610016

For direct connected and pilot operated

solenoid valves; 2-way solenoids, 3-way reclaim valves

For use with all manufacturers



# **TEMPERATURE MEASUREMENT TOOLS**

### **MULTI-INPUT DIGITAL THERMO-PSYCHROMETER & ACCESSORIES**



### TM360 Multi-Input Digital Thermo-Psychrometer & **Accessories** (Temp-Seeker)

DESCRIPTION

Solenoid Test Magnet

A professional grade thermo-psychrometer adaptable to accommodate many temperature, humidity, dry/wet bulb and dew point measurements. The unit incorporates four discrete temperature ports all capable of min/max and memory functions including temperature differential between any two of the four available ports. Pressing the SCAN key causes display to alternate between all four ports in 3 second intervals providing continuous monitoring of multiple probe points during critical system diagnosis. A dedicated special purpose port accommodates an optional state of the art

silicon humidity transducer probe for fast and accurate measurements during critical relative humidity calculations. Designed in a rugged polyethylene case, the TM360 is engineered to provide laboratory accuracy in rough field conditions. A generous probe storage area is provided for housing all your job specific probes directly in the unit itself.

- Range -40 to 257°F
- Differential measure between any two probes
- Includes air probe; general purpose probe; surface probe: other probes available
- Easy to use keypad controls

| PART NO | VENDOR PART NO | DESCRIPTION   |
|---------|----------------|---|
| TM360   | TM360          | Multi-Input Digital Thermo-Psychrometer & Accessories (Temp-Seeker) |



#### TMX3C Temperature Probe





#### 87-TMX2S (TMX2S) Temperature Probe - Velcro

| PART NO  | VENDOR PART NO | DESCRIPTION                |
|----------|----------------|----------------------------|
| 27-TMY2S | 2CXMT          | Temperature Prohe - Veloro |



#### 87-TMX2P (TMX2P) Puncture Probe

| PART NO  | VENDOR PART NO | DESCRIPTION    |
|----------|----------------|----------------|
| 87-TMX2P | TMX2P          | Puncture Probe |



#### **TESTO MEASUREMENT STICKS**



#### 875006 (0560 6054) Humidity and Temperature Stick (605-H2)

- Measures temperature and relative humidity
- Temperature range 32 to 122°F; humidity range 5 to 95% RH
- Easy to read swivel head can be turned 180°
- Quick-action displays final temperature in few seconds
- 5 inch length
- Includes holder for positioning in duct

| PART NO | VENDOR PART NO | DESCRIPTION                             |
|---------|----------------|---|
| 875006  | 0560 6054      | Humidity and Temperature Stick (605-H2) |



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# **TEMPERATURE MEASUREMENT TOOLS**

#### **TESTO MEASUREMENT STICKS**



# 875009 (0590 9052) Temperature Stick (905-T2)

- Temperature range -58 to 660°F
- Easy to read swivel head can be turned 180°
- Quick-action displays final temperature in a few seconds
- testo Special measuring head with spring steel thermocouples band adapts itself to uneven surfaces
- 7 inch length

| PART NO | VENDOR PART NO | DESCRIPTION                |
|---------|----------------|----------------------------|
| 875009  | 0560 9056      | Temperature Stick (905-T2) |

# **TEMPERATURE MEASUREMENT TOOLS**

#### **INFRARED THERMOMETERS**

#### 87-TMINI12 (MINI12) Infrared Thermometer (Temp-Seeker)

Infrared Thermometer

- Temperature range -76 to 932°F
- 12:1 distance to spot ratio
- Includes laser pointer
- Includes Type K thermocouple port
- Includes white LED work light
- Includes heavy-duty carrying pouch with belt loop
- 87-TMINI12 TMINI12 Infrared Thermometer (Temp-Seeker)



#### **52224A Infrared Thermometer**

52224A

- Temperature range -58 to 932°F
- 12:1 distance to spot ratio

52224A

#### **▼** Mastercool: Includes laser pointer

- Includes plastic shell carrying case

# **TEMPERATURE MEASUREMENT TOOLS**

#### **POCKET THERMOMETERS**



#### 1246-02-1 Pocket Thermometer - Analog

- Temperature range 0 to 220°F
- 5 inch stainless steel probe

• Includes protective sleeve with pocket clip and calibration wrench

| PART NO   | VENDOR PART NO | DESCRIPTION                 |
|-----------|----------------|-----------------------------|
| 1246-02-1 | 1246-02-1      | Pocket Thermometer - Analog |



#### 87-TMAP (TMAP) Pocket Thermometer – Analog

- Temperature range 0 to 220°F
- Includes protective sleeve with pocket clip

• 5 inch Stainless steel probe

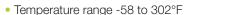
• 5 inch stainless steel probe



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# 87-TMDP (TMDP) Pocket Thermometer – Digital



Includes protective sleeve with pocket clip

Pocket Thermometer - Digital



87-TMDP

# **TEMPERATURE MEASUREMENT TOOLS**

#### **POCKET THERMOMETERS**

# 6

#### 52223-A Pocket Thermometer - Digital

- Temperature range -58 to 302°F
- Includes protective sleeve with pocket clip

• 5" stainless steel probe



| PART NO | VENDOR PART NO | DESCRIPTION                  |
|---------|----------------|------------------------------|
| 52223-A | 52223-A        | Pocket Thermometer - Digital |

#### 87-TM50 (TM50) Digital Thermometer (Temp-Seeker)



- Temperature range -58 to 500°F
- User selectable temperature alarm
- Countdown timer

- Min/Max memory
- 3-3/4 inch stainless steel probe with 4 ft. cord



# **ELECTRICAL METERS**



#### 87-DM350 (DM350) Digital Multimeter

- Auto range and data hold
- Maximum/minimum value measurement
- Backlit LCD display; four large characters
- Auto power-off
- DC voltage (V): 200m/2/20/200/600 ±0.7%
- AC voltage (V): 200m/2/20/200/600 ±0.7%
- DC current (A): 200μ/2000μ/20m/200m ±1.2%; 2/10 ±2.0%
- AC current (A): 200µ/2000µ/20m/200m ±1.5%; 2/10 ±3.0%
- Resistance (ohms): 200/2k/20k/200k/2M ±1.2%; 20M ±2.0%
- Temperature: -20 to 1000°C ±3.0%, 0°F to 1800°F ±3.0%
- Capacitance (F): 20n/200n/2μ/20μ/200μ/ 2000μ ±4.0%
- Audible continuity tester
- Diode tester
- Transistor hFE tester
- Includes electrical probe set and thermocouple

| PART NO  | VENDOR PART NO | DESCRIPTION        |
|----------|----------------|--------------------|
| 87-DM350 | DM350          | Digital Multimeter |



#### **Short-Pro Short Finder Tool - 24V**

Finds 24V shorts quickly. Connects across 24V fuse holder. Lighted LED indicates short (trips at 3A). Disconnect briefly to reset.



| PART NO | VENDOR PART NO | DESCRIPTION                       |  |
|---------|----------------|-----------------------------------|--|
| ZSPRT   | ZSPRT          | Short-Pro Short Finder Tool - 24V |  |

# **INSPECTION SCOPES & MIRRORS**

#### **TESTOVIEW FIBERSCOPES**



#### **TestoView Fiberscopes**

Powerful fiber optic scope allows examination of areas normally hidden from sight. Ideal for internal inspection of furnaces, ducts, A/C systems, interior structures, between walls and many other HVAC and industrial applications. Includes a comfortable grip handle for long term inspections, a convenient on/off light switch and

an easily adjustable eyepiece.

- Spring lock flexible shaft holds shape
- Superior optics; 40 degree viewing angle; 0.4 inch and up viewing distance
- 25 hour battery life
- Bright white lighting with high/low beam

| PART NO | VENDOR PART NO | DESCRIPTION                           |
|---------|----------------|---------------------------------------|
| 875012  | 400632 0318    | TestoView Fiberscope - 36 in. (318-1) |



#### **Magnetic Attachment for TestoView Fiberscopes**

| PART NO | VENDOR PART NO | DESCRIPTION                     |
|---------|----------------|---------------------------------|
| 875017  | 400554 1321    | Magnet for TestoView Fiberscope |



testo



#### Mirror Attachment for TestoView Fiberscopes

| PART NO | VENDOR PART NO | DESCRIPTION                                |
|---------|----------------|--|
| 875016  | 400544 1320    | Inspection Mirror for TestoView Fiberscope |



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#### **INSPECTION MIRRORS**



#### 87-TLMIR1 (TLMIR1) Inspection Mirror

- 1-1/4 inch diameter mirror on telescoping handle 6-1/4 to 19-1/2 inches
- Ball joint swivel connection allows for 360 degree viewing
- Bright plated finish on handle and mirror backing
- Convenient "pen style" pocket clip on handle

| PART NO   | VENDOR PART NO | DESCRIPTION       |
|-----------|----------------|-------------------|
| 87-TLMIR1 | TI MIR1        | Inspection Mirror |



### 87-TLMIR2 (TLMIR2) Inspection Mirror

- 2-1/4 inch diameter mirror on telescoping handle 10 to 14 inches
- Ball joint swivel connection allows for 360 degree viewing
- Bright plated finish on handle and mirror backing

| PART NO    | VENDOR PART NO | DESCRIPTION       |
|------------|----------------|-------------------|
| 87-TI MIR2 | TI MIR2        | Inspection Mirror |



#### 87-TLMIR3 (TLMIR3) Inspection Mirror

- 1 x 2 inch mirror on telescoping handle 6-1/4 to 19-1/2 inches
- Ball joint swivel connection allows for 360 degree viewing
- Bright plated finish on handle and mirror backing
- · Convenient "pen style" pocket clip on handle

| PART NO   | VENDOR PART NO | DESCRIPTION       |
|-----------|----------------|-------------------|
| 87-TLMIR3 | TLMIR3         | Inspection Mirror |



#### 87-TLMIR4 (TLMIR4) Inspection Mirror

- 2-1/8 x 3-1/2 inch mirror on telescoping handle 11-1/4 to 15-1/4 inches
- Ball joint swivel connection allows for 360 degree viewing
- Bright plated finish on handle and mirror backing

| PART NO   | VENDOR PART NO | DESCRIPTION       |
|-----------|----------------|-------------------|
| 87-TLMIR4 | TLMIR4         | Inspection Mirror |

# **FIN TOOLS**



#### 87-TLFC1 (TLFC1) Fin Tool

Spring wire bristles adjust to all fin spacings.



| PART NO  | VENDOR PART NO | DESCRIPTION                 |
|----------|----------------|-----------------------------|
| 87-TLFC1 | TLFC1          | Fin Comb Straightening Tool |



#### 87-TLFC6 (TLFC6) Fin Tool

Six sided fin comb for 6, 8, 10, 12, 14 and 15 fins per inch.

**CPS** 

| PART NO  | VENDOR PART NO | DESCRIPTION                 |
|----------|----------------|-----------------------------|
| 87-TLFC6 | TLFC6          | Fin Comb Straightening Tool |



#### 875001 Fin Tool

Includes six heads 8, 9, 10, 11, 12 and 14 fins per inch. Heads are angled so that the hand is a

safe distance from sharp fins. Reversible head for improved leverage in all orientations.

| PART NO | VENDOR PART NO | DESCRIPTION                 |
|---------|----------------|-----------------------------|
| 875001  | T-100          | Fin Comb Straightening Tool |

# **FAN BLADE & BLOWER WHEEL PULLER**



#### Fan Blade & Blower Wheel Puller

- Removes fan blades/blower wheels that are frozen to a motor shaft.
- Four pulling hooks and three set screws provided
- Can be used to apply a pushing or pulling force.
- Accommodates motor shafts up to 5/8 inch (belt drive) and 1/2 inch (direct drive)

| PART NO | DESCRIPTION        |
|---------|--------------------|
| UP-1    | Ultimate Fan Pulle |

# WRENCHES, PLIERS, SCREWDRIVES & HAND TOOLS





#### **Torque Wrench Sets (Open End Wrenches)**

- Provides consistently accurate readings and trouble-free performance
- SAE set includes interchangeable 5/8, 11/16, 13/16, 15/16, 1-1/16, 1-5/16 in. jaw sizes
- Metric set includes interchangeable 17, 22, 24,
- 26, 27, 29 mm jaw sizes
- Corresponding settings clearly marked on torque wrench
- SAE set: 5-80 ft.-lbs or 60-960 in.-lbs.
- Metric set: 10-75 N-m

| PART NO | DESCRIPTION                                  |
|---------|--|
| TLTWSAE | SAE Torque Wrench Set (Open End Wrenches)    |
| TLTWSM  | Metric Torque Wrench Set (Open End Wrenches) |



#### **WRENCHES - REFRIGERATION SERVICE WRENCHES**



#### 87-68309 (68309) Refrigeration Service Wrench - Ratcheting



| PART NO  | VENDOR PART NO | HEX SOCKET SIZES (IN) | SQUARE SOCKET SIZES (IN) | TYPE               | WRENCH CONFI |
|----------|----------------|-----------------------|--------------------------|--------------------|--------------|
| 87-68309 | 68309          | _                     | 3/16, 1/4, 1/2, 9/16     | Reversible Ratchet | Flat         |



#### 87-68310 (68310) Refrigeration Service Wrench - Ratcheting



| PART NO  | VENDOR PART NO | HEX SOCKET SIZES (IN) | SQUARE SOCKET SIZES (IN) | TYPE               | WRENCH CONFIG |  |
|----------|----------------|-----------------------|--------------------------|--------------------|---------------|--|
| 87-68310 | 68310          | _                     | 3/16, 1/4, 5/16, 3/8     | Reversible Ratchet | Flat          |  |



#### 87-TLSWL (TLSWL) Refrigeration Service Wrench - Ratcheting



| PART NO  | VENDOR PART NO | HEX SOCKET SIZES (IN) | SQUARE SOCKET SIZES (IN) | TYPE               | WRENCH CONFIG |  |
|----------|----------------|-----------------------|--------------------------|--------------------|---------------|--|
| 87-TLSWL | TLSWL          | 1/2, 9/16             | 3/16, 1/4                | Reversible Ratchet | Flat          |  |



#### 87-TLSWS (TLSWS) Refrigeration Service Wrench - Ratcheting

CDS

| PART NO  | VENDOR PART NO | HEX SOCKET SIZES (IN) | SQUARE SOCKET SIZES (IN) | TYPE               | WRENCH CONFIG |  |
|----------|----------------|-----------------------|--------------------------|--------------------|---------------|--|
| 87-TLSWS | TLSWS          | _                     | 3/16, 1/4, 5/16, 3/8     | Reversible Ratchet | Flat          |  |



#### 87-TLSWO (TLSWO) Refrigeration Service Wrench - Ratcheting

CDS

| PART NO  | VENDOR PART NO | HEX SOCKET SIZES (IN) | SQUARE SOCKET SIZES (IN) | ТҮРЕ               | WRENCH CONFIG       |  |
|----------|----------------|-----------------------|--------------------------|--------------------|---------------------|--|
| 87-TLSWO | TLSW0          | _                     | 3/16. 1/4. 5/16. 3/8     | Reversible Ratchet | Offset Socket Heads |  |



#### 70082 Refrigeration Service Wrench - Ratcheting



| PART NO | VENDOR PART NO | HEX SOCKET SIZES (IN) | SQUARE SOCKET SIZES (IN) | TYPE               | WRENCH CONFIG |  |
|---------|----------------|-----------------------|--------------------------|--------------------|---------------|--|
| 70082   | 70082          | _                     | 1/4, 3/8, 3/16 and 5/16  | Reversible Ratchet | Flat          |  |



#### **Hex Key Inserts for Refrigeration Service Wrenches**

| PART NO | DESCRIPTION  |
|---------|--|
| 10550   | Refrigeration Wrench Hex Key Inserts - 3/16 in. (1/4 in. square drive) |
| 10551   | Refrigeration Wrench Hex Key Inserts - 5/16 in. (1/4 in. square drive) |



#### Ratcheting Box Wrench - 1/4 in. x 5/16 in.

TOOLS 150

Great for working in confined spaces and on long studs. A different size opening on each end

for multiple applications. Get reverse ratcheting action simply by turning the wrench over.

| PART NO | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) |
|---------|----------------|---------------------|-----------------------|
| 68200   |                |                     |                       |

#### WRENCHES – ADJUSTABLE WRENCHES (CRESCENT-STYLE)

- Precision-machine jaws individually selected and assembled by hand for smooth operation
- Knurl turns smoothly for easy operation
- Forged heat-treated alloy steel for maximum strength and light weight
- High polish chrome finish



#### **Adjustable Wrenches – Standard Capacity**



| PART NO    | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) |
|------------|----------------|---------------------|-----------------------|
| 87-D500-18 | D500-18        | 18-1/4              | 2-1/16                |



#### **Adjustable Wrenches - Extra Capacity**



| PART NO    | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) |  |
|------------|----------------|---------------------|-----------------------|--|
| 87-D507-6  | D507-6         | 6-3/8               | 15/16                 |  |
| 87-D507-8  | D507-8         | 8-3/8               | 1-1/8                 |  |
| 87-D507-10 | D507-10        | 10-3/8              | 1-5/16                |  |
| 87-D507-12 | D507-12        | 12-3/8              | 1-1/2                 |  |
|            |                |                     |                       |  |

#### PLIERS - CHANNEL-LOCK PLIERS (PUMP PLIERS)



#### Channel-Lock Pliers

Secure tongue and groove design for non-slip grip – even with heavy pressure

· Wide range of versatile jaw positions



KLEIN (150)

| PART NO    | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) | HANDLE FINISH  | HANDLE COLOR |  |
|------------|----------------|---------------------|-----------------------|----------------|--------------|--|
| 87-D502-6  | D502-6         | 6-1/2               | 7/8                   | Plastic-dipped | Yellow       |  |
| 87-D502-10 | D502-10        | 10                  | 1-3/4                 | Plastic-dipped | Yellow       |  |
| 87-D502-12 | D502-12        | 12-1/4              | 2-3/8                 | Plastic-dipped | Yellow       |  |



#### Channel-Lock Pliers (Journeyman)

- Secure tongue and groove design for non-slip grip – even with heavy pressure
- Wide range of versatile jaw positions

| <ul> <li>Tension-loaded joint to reduce</li> </ul> |
|--|
| handle wobble for sure gripping                    |

Induction-hardened jaws for long life

| PART NO    | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) | HANDLE FINISH | HANDLE COLOR |  |
|------------|----------------|---------------------|-----------------------|---------------|--------------|--|
| 87-J502-10 | J502-10        | 10-1/4              | 1-3/4                 | Journeyman    | Yellow/Black |  |

#### PLIERS - SLIP-JOINT PLIERS



#### **Slip-Joint Pliers**

- Shear-type cutter for precision wire cutting
- Two versatile jaw positions
- Serrated jaws provide sure-gripping power
- Nickel-chrome plated for long life
- Knurled handles for greater leverage

| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | JAW WIDTH (IN) | HANDLE FINISH  | HANDLE COLOR   |
|-----------|----------------|---------------------|-----------------|----------------|----------------|----------------|
| 87-D511-6 | D511-6         | 6-9/16              | 1-3/16          | 1-3/16         | Plastic-dipped | Turquoise Blue |



#### Slip-Joint Pliers - Hose Clamp

- Quickly installs and removes spring-tension hose clamps
- Nickel-chrome plated for long life

| <ul> <li>Grips with either end or side of</li> </ul> |
|--|
| iaws for work in confined areas                      |



KLEIN 150

87-D514-8 D514-8 8-1/16 1-3/8 1-1/4 Plastic-dipped Turquoise Blue

#### PLIERS - SIDE-CUTTING PLIERS



#### **Side-Cutting Pliers - High-Leverage**

 High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs

- · Streamlined design with suregripping, cross-hatched knurled jaws
- Induction-hardened cutting knives for long life

| PART NO     | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | HANDLE FINISH  | HANDLE COLOR |  |
|-------------|----------------|---------------------|-----------------|----------------|--------------|--|
| 87-D213-8NE | E D213-8NE     | 8-11/16             | 1-7/16          | Plastic-dipped | Dark Blue    |  |
| 87-D213-9NE | E D213-9NE     | 9-3/8               | 1-19/32         | Plastic-dipped | Dark Blue    |  |



#### Side-Cutting Pliers – High-Leverage – Heavy-Duty

- Induction-hardened cutting knives for long life
- Cuts ACSR, screws, nails and most wire
- High-leverage design. Rivet is closer to the cutting edge for 46% greater cutting and gripping power than other plier designs
- Streamlined design with suregripping, cross-hatched knurled jaws
- · Features combination polished and blackoxide finish

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | HANDLE FINISH  | HANDLE COLOR |
|----------|----------------|---------------------|-----------------|----------------|--------------|
| 87-D2000 | -9NF D2000-9NF | 9-3/8               | 1-19/32         | Plastic-dipped | Royal Blue   |

#### **PLIERS - SIDE-CUTTING PLIERS**



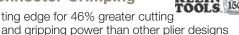
#### Side-Cutting Pliers - High-Leverage - Heavy-Duty (Journeyman) KLEIN (550)



| PART NO      | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | HANDLE FINISH | HANDLE COLOR     |
|--------------|----------------|---------------------|-----------------|---------------|------------------|
| 87-J2000-9NE | J2000-9NE      | 9-1/2               | 1-19/32         | Journeyman    | Light Blue/Black |



#### Side-Cutting Pliers – High-Leverage/Connector Crimping



- Induction-hardened cutting knives for long life Crimping die behind hinge for superior leverage crimping non-insulated connectors, lugs and terminals
- High-leverage design; rivet is closer to the cut-

| <ul> <li>Streamlined design with</li> </ul> | rounded nos  | se and |
|---|--------------|--------|
| sure-gripping, cross-hatc                   | ched knurled | l jaws |
|   |              |        |

| PART NO        | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | HANDLE FINISH  | HANDLE COLOR |  |
|----------------|----------------|---------------------|-----------------|----------------|--------------|--|
| 87-D213-9NE-CR | D213-9NE-CR    | 9-3/8               | 1-19/32         | Plastic-dipped | Yellow       |  |

#### **PLIERS - DIAGONAL-CUTTING PLIERS**



#### **Diagonal-Cutting Pliers - High-Leverage -**Heavy-Duty (Journeyman)





 Induction-hardened knives for long life High-leverage design; rivet is closer to the cutting edge for 36% greater cutting and

 Short jaws and beveled cutting edges permit close cutting of wire

| PART NO    | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | JAW WIDTH (IN) | HANDLE FINISH | HANDLE COLOR     |
|------------|----------------|---------------------|-----------------|----------------|---------------|------------------|
| 87-J2000-2 | 8 J2000-28     | 8-1/8               | 13/16           | 1-3/16         | Journeyman    | Light Blue/Black |



#### **Diagonal-Cutting Pliers - High-Leverage -**Angled Head - Heavy-Duty



KLEIN 150



| PART NO     | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | JAW WIDTH (IN) | HANDLE FINISH  | HANDLE COLOR |
|-------------|----------------|---------------------|-----------------|----------------|----------------|--------------|
| 87-D2000-48 | D2000-48       | 8-1/16              | 13/16           | 1-3/16         | Plastic-dipped | Royal Blue   |



### **Diagonal-Cutting Pliers - High-Leverage -**Angled Head - Heavy-Duty (Journeyman)





| PART NO     | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | JAW WIDTH (IN) | HANDLE FINISH | HANDLE COLOR     |
|-------------|----------------|---------------------|-----------------|----------------|---------------|------------------|
| 87-J2000-48 | J2000-48       | 8-1/8               | 13/16           | 1-3/16         | Journeyman    | Light Blue/Black |



#### **Diagonal-Cutting Pliers - Tapered Nose**

Easy working in confined spaces.





| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | JAW WIDTH (IN) | HANDLE FINISH  | HANDLE COLOR |
|-----------|----------------|---------------------|-----------------|----------------|----------------|--------------|
| 87-D202-6 | D202-6         | 6-1/8               | 13/16           | 11/16          | Plastic-dipped | Red          |



#### **Diagonal-Cutting Pliers - Tapered Nose - Heavy Duty**

| KLEIN  | 62  |
|--------|-----|
| TOOLS. | 150 |

TOOLS 150

| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | JAW LENGTH (IN) | JAW WIDTH (IN) | HANDLE FINISH  | HANDLE COLOR |
|-----------|----------------|---------------------|-----------------|----------------|----------------|--------------|
| 87-D220-7 | D220-7         | 7-11/16             | 1               | 31/32          | Plastic-dipped | Red          |





#### **Needle-Nose Pliers - Midget Slim-Nose**

• Lightweight slim-nose pliers for precision subminiature assembly work

Knurled jaws for sure-wrapping and looping

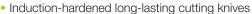
Curved handles provide greater tool control

| PART NO    | VENDOR PART NO  | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) | HANDLE FINISH  | HANDLE COLOR |
|------------|-----------------|---------------------|-----------------------|----------------|--------------|
| 87-D321-41 | 1/2C D321-41/2C | 4-13/16             | 1-1/16                | Plastic-dipped | Royal Blue   |

#### PLIERS - NEEDLE-NOSE (LONG-NOSE) PLIERS



#### **Needle-Nose Pliers - Side-Cutting**



- Knurled jaws for sure wrapping and looping
- Curved handles provide greater tool control

| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) | HANDLE FINISH  | HANDLE COLOR |
|-----------|----------------|---------------------|-----------------------|----------------|--------------|
| 87-D203-6 | D203-6         | 6-5/8               | 1-7/8                 | Plastic-dipped | Yellow       |
| 87-D203-7 | D203-7         | 7-3/16              | 2-7/16                | Plastic-dipped | Yellow       |



#### Needle-Nose Pliers - Side-Cutting (Journeyman)

- Induction-hardened long-lasting cutting knives
- Knurled jaws for sure-wrapping and looping

| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) | HANDLE FINISH | HANDLE COLOR |  |
|-----------|----------------|---------------------|-----------------------|---------------|--------------|--|
| 87-J203-6 | J203-6         | 6-3/4               | 1-7/8                 | Journeyman    | Yellow/Black |  |



### **Needle-Nose Pliers - Side-Cutting/Wire Stripping - Heavy-Duty**

- Heavier design for greater cutting power
- Induction-hardened long-lasting cutting knives
- Cleanly strips 12 AWG wire
- Knurled jaws for sure-wrapping and looping

| PART NO    | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) | HANDLE FINISH  | HANDLE COLOR |  |
|------------|----------------|---------------------|-----------------------|----------------|--------------|--|
| 87-D203-8N | D203-8N        | 8-7/16              | 2-5/16                | Plastic-dipped | Yellow       |  |



#### **Insulated Needle-Nose Pliers - Side-Cutting - Heavy Duty**

- Insulated handles rated up to 1000V
- Individually tested to exceed standards
- Extended handles provide added reach and leverage
- Heavier design for easier, more comfortable cutting
- Induction-hardened cutting knives for long life

| PART NO      | VENDOR PART NO | OVERALL LENGTH (IN) | MAX JAW CAPACITY (IN) | HANDLE FINISH | HANDLE COLOR |  |
|--------------|----------------|---------------------|-----------------------|---------------|--------------|--|
| 87-D203-8-IN | S D203-8-INS   | 8-7/8               | 2-5/16                | Insulated     | Orange       |  |

#### **HEX KEYS - FOLDING HEX-KEY SETS**



#### **Folding Hex-Key Sets**

Hex ends are square-cut for a secure full-depth fit and maximum contact with the hex socket to prevent slippage and stripping of the socket.

| PART NO  | VENDOR PART NO | DESCRIPTION  |  |
|----------|----------------|--|--|
| 87-70579 | 70579          | 3/16, 7/32, 1/4, 5/16, 3/8                         |  |
| 87-70581 | 70581          | 0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32     |  |
| 87-70591 | 70591          | 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4 |  |



#### Folding Hex-Key Sets (Grip-It)

• Grip-It® handle provides sturdy comfortable grip to maximize torque

 Hex ends are square-cut for a secure full-depth fit and maximum contact with the hex socket to prevent slippage and stripping of the socket

| PART NO  | VENDOR PART NO | DESCRIPTION  |
|----------|----------------|--|
| 87-70570 | 70570          | 3/16, 7/32, 1/4, 5/16, 3/8                           |
| 87-70574 | 70574          | 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4   |
| 87-70575 | 70575          | 0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16 |



KLEIN 150

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#### **HEX KEYS - L-STYLE HEX-KEY SETS**

# FUELS.

#### L-Style Hex-Key Caddy Sets (Square-Cut)

- L-style hex keys in convenient caddy sets
- Caddy contains a unique locking feature and marked slots for each key
- Hex ends are square-cut for a secure full-

depth fit and maximum contact with the hex socket to prevent slippage and stripping of the socket

TOOLS 150

KLEIN 150

| PART NO  | VENDOR PART NO | DESCRIPTION  |  |
|----------|----------------|--|--|
| 87-LLK12 | LLK12          | .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 |  |



#### L-Style Hex-Key Caddy Sets (Ball Ends)

Ball-end works on angles up to 30 degrees.





### **T-Handle Hex-Key Sets with Stand**



| PART NO | VENDOR PART NO | DESCRIPTION                                    |
|---------|----------------|--|
| JTH910F | .ITH910F       | 3/32 7/64 1/8 9/64 5/32 3/16 7/32 1/4 5/16 3/8 |



#### **SCREWDRIVERS - CUSHION-GRIP SCREWDRIVER SETS**



#### 2-Piece Cushion-Grip Stubby Screwdriver Set

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE LENGTH (IN) | TIP STYLE | TIP WIDTH | SHANK STYLE |
|----------|----------------|---------------------|-------------------|-----------|-----------|-------------|
| 87-85071 | 85071          | 3-7/16              | 1-1/2             | Keystone  | 1/4 in.   | Round       |
|          |                | 3-7/16              | 1-1/2             | Phillips  | #2        | Round       |



#### **7-Piece Cushion-Grip Screwdriver Set**

| ١ |          |                | -                   |                   |           |           | TO DO STORES |
|---|----------|----------------|---------------------|-------------------|-----------|-----------|--------------|
|   | PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE LENGTH (IN) | TIP STYLE | TIP WIDTH | SHANK STYLE  |
|   | 87-85076 | 85076          | 8-11/32             | 4                 | Keystone  | 1/4       | Square       |
|   |          |                | 10-15/16            | 6                 | Keystone  | 5/16      | Round        |
|   |          |                | 6-3/4               | 3                 | Cabinet   | 3/16      | Round        |
|   |          |                | 9-3/4               | 6                 | Cabinet   | 3/16      | Round        |
|   |          |                | 8-11/32             | 4                 | Cabinet   | 1/4       | Round        |
|   |          |                | 6-3/4               | 3                 | Phillips  | #1        | Round        |
|   |          |                | 8-5/16              | 4                 | Phillips  | #2        | Round        |
|   |          |                |                     |                   |           |           |              |



#### **SCREWDRIVERS - CUSHION-GRIP SCREWDRIVERS**

- · Cushion-Grip handle allows for greater toque and comfort
- Integral flanges inside handle provide sold twist-resistant blade anchor
- Special heat-treated shafts
- Patented Tip-Ident® quickly identifies the type of screwdriver and tip



#### **Cushion-Grip Cabinet-Tip Screwdrivers – Round-Shanks**

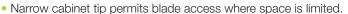
Narrow cabinet tip permits blade access where space is limited.



| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION | TIP WIDTH (IN) |
|----------|----------------|---------------------|-------------------------|-------------|-----------------|----------------|
| 87-601-3 | 601-3          | 6-3/4               | 3                       | Round       | Cabinet         | 3/16           |
| 87-601-4 | 601-4          | 7-3/4               | 4                       | Round       | Cabinet         | 3/16           |
| 87-601-6 | 601-6          | 9-3/4               | 6                       | Round       | Cabinet         | 3/16           |
| 87-601-8 | 601-8          | 11-3/4              | 8                       | Round       | Cabinet         | 3/16           |



# Cushion-Grip Cabinet-Tip Screwdrivers – Heavy-Duty Round-Shanks



Heavy-duty round shank

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION | TIP WIDTH (IN) |
|----------|----------------|---------------------|-------------------------|-------------|-----------------|----------------|
| 87-605-4 | 605-4          | 8-11/32             | 4                       | Round       | Cabinet         | 1/4            |
| 87-605-6 | 605-6          | 10-11/32            | 6                       | Round       | Cabinet         | 1/4            |
| 87-605-8 | 605-8          | 12-11/32            | 8                       | Round       | Cabinet         | 1/4            |



# Cushion-Grip Keystone-Tip Screwdrivers – Heavy-Duty Round-Shanks

Hex bolster reinforces shank for hard use and allows wrench-assisted turning.

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION | TIP WIDTH (IN) |
|----------|----------------|---------------------|-------------------------|-------------|-----------------|----------------|
| 87-602-4 | 602-4          | 8-11/32             | 4                       | Round       | Keystone        | 1/4            |
| 87-602-6 | 602-6          | 10-5/16             | 6                       | Round       | Keystone        | 5/16           |
| 87-602-8 | 602-8          | 13-7/16             | 8                       | Round       | Keystone        | 3/8            |



# Cushion-Grip Keystone-Tip Screwdrivers – Heavy-Duty Square-Shanks



- Bolster reinforces shank for hard use
- Designed for the most demanding uses

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION | TIP WIDTH (IN) |
|----------|----------------|---------------------|-------------------------|-------------|-----------------|----------------|
| 87-600-4 | 600-4          | 8-11/32             | 4                       | Square      | Keystone        | 1/4            |
| 87-600-6 | 600-6          | 10-15/16            | 6                       | Square      | Keystone        | 5/16           |
| 87-600-8 | 600-8          | 13-7/16             | 8                       | Square      | Kevstone        | 3/8            |



# Cushion-Grip Profilated Phillips-Tip Screwdrivers – Round-Shanks



Provides accurate fit and torque without slippage

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION       | PHILLIPS SIZE |
|----------|----------------|---------------------|-------------------------|-------------|-----------------------|---------------|
| 87-603-1 | 603-1          | 3-7/16              | 1-1/2                   | Round       | Phillips - Profilated | #2            |
| 87-603-4 | 603-4          | 8-5/16              | 4                       | Round       | Phillips - Profilated | #2            |







TOOLS 150



#### **SCREWDRIVERS - PLASTIC HANDLE SCREWDRIVERS**

- Tough amber plastic handle
- Integral flanges inside handle provide sold twist-resistant shaft anchor



#### Plastic-Handle Cabinet-Tip Screwdrivers - Round-Shanks

Small-diameter shank for use in recessed holes or tight places

Well-suited for electrical and telecommunications work

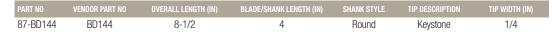
| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION | TIP WIDTH (IN) |
|-----------|----------------|---------------------|-------------------------|-------------|-----------------|----------------|
| 87-A216-6 | A216-6         | 9                   | 6                       | Round       | Cabinet         | 1/8            |
| 87-A3166  | A316-6         | 9-5/8               | 6                       | Round       | Cabinet         | 3/16           |



#### Plastic-Handle Keystone-Tip Screwdrivers – Round-Shanks

Oversized handle is 35% larger than comparable screwdriver handles

• Delivers up to 50% extra power to perform tough jobs with minimum effort





#### Plastic-Handle Keystone-Tip Screwdrivers - Square-Shanks

Oversized handle is 35% larger than comparable screwdriver handles

• Delivers up to 50% extra power to perform tough jobs with minimum effort

Square shank for wrench-assisted turning

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION | TIP WIDTH (IN) |
|----------|----------------|---------------------|-------------------------|-------------|-----------------|----------------|
| 87-BD286 | BD286          | 10-1/2              | 6                       | Square      | Keystone        | 1/4            |



## Plastic-Handle Profilated Phillips-Tip Screwdrivers -







#### Plastic-Handle Cabinet-Tip Screwdrivers - Pocket-Clip

Includes convenient pocket clip.

| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION | TIP WIDTH (IN) |
|-----------|----------------|---------------------|-------------------------|-------------|-----------------|----------------|
| 87-A130-3 | A130-3         | 4-7/8               | 3                       | Round       | Cabinet         | 1/8            |
| 87-A116-3 | A116-3         | 5-7/16              | 3                       | Round       | Cabinet         | 3/32           |

#### **SCREWDRIVERS - SPECIALTY SCREWDRIVERS**



#### 10-in-1 Screwdriver/Nut Driver

Includes two nut drivers (1/4 and 5/16 inch); two slotted-tip screw drivers (1/4 inch and 3/16 inch); ttwo Phillips-tip (#1 and #2); two TORX bits (#10 and #15) and two square-recess bits (#1 and #2).

| PART NO  | VENDOR PART NO | DESCRIPTION                    |  |
|----------|----------------|--------------------------------|--|
| 87-32477 | 32477          | 10-in-1 Screwdriver/Nut Driver |  |



#### 5-in-1 Screwdriver/Nut Driver

Includes 5/16 inch nut driver; two Phillips-tip (#1 and #2); two standard-tips (3/16 and 9/32)

| PART NO  | VENDOR PART NO | DESCRIPTION                   |
|----------|----------------|-------------------------------|
| 87-32476 | 32476          | 5-in-1 Screwdriver/Nut Driver |





KLEIN 150





#### **SCREWDRIVERS - SPECIALTY SCREWDRIVERS**



#### 4-in-1 Screwdriver/Nut Driver

VENDOR PART NO

32460

Includes standard-tips (3/16 and 9/32 inch) and two Phillips-tips (#1 and #2).

4-in-1 Screwdriver



CDS



#### **Auto-Loading Screwdriver**

- Patented auto-loading bit design
- Pull handle back to move bit to storage chamber
- Rotate handle to select bit

87-32460

- Push handle forward to load bit

| <ul> <li>Standard 1/4 inch hex drive;</li> </ul>  |
|---|
| includes six replaceable industrial grade bits;   |
| three standard-tip screwdriver bits; two          |
| Phillips-tip bits; and one valve core removal tip |

• Magnetic head holds fastener in place

| PART NO  | VENDOR PART NO | DESCRIPTION              |
|----------|----------------|--------------------------|
| 87-TLSD1 | TLSD1          | Auto-Loading Screwdriver |



#### **Phillips-Tip Screw-Holding Screwdrivers**

 Positive gripping action holds and starts screws in awkward, hard to reach places

- Blade separates to hold the screw
- Not designed for torquing or tightening

| PART NO | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | SHANK STYLE | TIP DESCRIPTION          | TIP WIDTH (IN) |
|---------|----------------|---------------------|-------------------------|-------------|--------------------------|----------------|
| 87-K16  | K16            | 7                   | _                       | _           | Phillips - Screw Holding | All            |

#### **NUT DRIVERS - CUSHION-GRIP**

- Cushion-Grip handle allows for greater torque and comfort
- Patented Tip-Ident® quickly identifies nut driver and size



#### Cushion-Grip Magnetic Long Nut Drivers - 18" Shanks

Rare earth magnetic tip.



| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) | 18305.01 |
|-----------|----------------|---------------------|-------------------------|---------------|----------|
| 646-1/4M  | 646-1/4M       | 9-3/4               | 6                       | 1/4           |          |
| 646-5/16M | 646-5/16M      | 9-3/4               | 6                       | 5/16          |          |



#### **Cushion-Grip Magnetic Long Nut Drivers – 18" Shanks**

Rare earth magnetic tip.



| PART NO     | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |  |
|-------------|----------------|---------------------|-------------------------|---------------|--|
| 87-618-1/4N | 1 618-1/4M     | 21-3/4              | 18                      | 1/4           |  |
| 87-618-5/16 | 618-5/16M      | 21-3/4              | 18                      | 5/16          |  |



#### Cushion-Grip Nut Drivers - 3" Shanks





| PART NO     | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |
|-------------|----------------|---------------------|-------------------------|---------------|
| 87-630-1/4  | 630-1/4        | 6-3/4               | 3                       | 1/4           |
| 87-630-5/16 | 630-5/16       | 6-3/4               | 3                       | 5/16          |
| 87-630-3/8  | 630-3/8        | 6-3/4               | 3                       | 3/8           |
| 87-630-7/16 | 630-7/16       | 7-5/16              | 3                       | 7/16          |



#### **Cushion-Grip Nut Drivers – 6" Shanks**





| PART NO     | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |  |
|-------------|----------------|---------------------|-------------------------|---------------|--|
| 87-646-1/4  | 646-1/4        | 9-3/4               | 6                       | 1/4           |  |
| 87-646-5/16 | 646-5/16       | 9-3/4               | 6                       | 5/16          |  |
| 87-646-3/8  | 646-3/8        | 9-3/4               | 6                       | 3/8           |  |
| 87-646-1/2  | 646-1/2        | 10-5/16             | 6                       | 1/2           |  |

#### **NUT DRIVERS - PLASTIC-HANDLE**



#### Plastic-Handle Stubby Nut Drivers - 1-1/4" Shanks

KLEIN (50)



| PART NO      | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |
|--------------|----------------|---------------------|-------------------------|---------------|
| 87-SS8-1/4   | SS8            | 3-3/4               | 1-1/4                   | 1/4           |
| 87-SS10-5/16 | 6 SS10         | 3-3/4               | 1-1/4                   | 5/16          |
| 87-9912-3/8  | SS12           | 3-3/4               | 1-1//                   | 3/8           |



#### Plastic-Handle Nut Drivers - 3" Shanks

TOOLS 150





| PART NO      | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |
|--------------|----------------|---------------------|-------------------------|---------------|
| 87-S8-1/4    | S8             | 6-5/8               | 3                       | 1/4           |
| 87-S10-5/16  | S10            | 6-5/8               | 3                       | 5/16          |
| 87-S12-3/8   | S12            | 6-5/8               | 3                       | 3/8           |
| 87-S14-7/16  | S14            | 7                   | 3                       | 7/16          |
| 87-S11-11/32 | 2 S11          | 6-5/8               | 3                       | 11/32         |



#### Plastic-Handle Nut Drivers - 6" Shanks

KLEIN 150

| PART NO      | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |
|--------------|----------------|---------------------|-------------------------|---------------|
| 87-S86-1/4   | S86            | 9-5/8               | 6                       | 1/4           |
| 87-S106-5/16 | S106           | 9-5/8               | 6                       | 5/16          |
| 87-S126-3/8  | S126           | 9-5/8               | 6                       | 3/8           |
| 87-S116-11/3 | 2 S116         | 9-5/8               | 6                       | 11/32         |



#### **NUT DRIVERS - PLASTIC-HANDLE**



#### **Plastic-Handle Magnetic Nut Drivers – 3" Shanks**

TOOLS 150

Rare earth magnetic tip.

| PART NO     | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |
|-------------|----------------|---------------------|-------------------------|---------------|
| 87-S8M-1/4  | S8M            | 6-5/8               | 3                       | 1/4           |
| 87-S10M-5/1 | 6 S10M         | 6-5/8               | 3                       | 5/16          |



#### **Plastic-Handle Magnetic Nut Drivers - 6" Shanks**

Rare earth magnetic tip.

| PART NO       | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |
|---------------|----------------|---------------------|-------------------------|---------------|
| 87-S86M-1/4   | S86M           | 9-5/8               | 6                       | 1/4           |
| 87-S106M-5/16 | 6 S106M        | 9-5/8               | 6                       | 5/16          |



#### Plastic-Handle Long Nut Drivers – 18" Shanks



| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | BLADE/SHANK LENGTH (IN) | HEX SIZE (IN) |
|-----------|----------------|---------------------|-------------------------|---------------|
| 87-S818M  | S818M          | 21-5/8              | 18                      | 1/4           |
| 87-S1018M | S1018M         | 21-5/8              | 18                      | 5/16          |

#### **NUT DRIVERS - SETS**



#### 7-Piece Plastic-Handle Nut Driver Set – 3" Shanks



- Set contains seven hollow-shaft nut drivers in the most popular hex sizes
- Convenient vinyl pouch hangs up, rolls up

| PART NO | VENDOR PART NO | INCLUDES SIZES (IN)                    |
|---------|----------------|--|
| 87-K7   | K7             | 3/16, 1/4, 5/16, 11/32, 3/8, 7/16, 1/2 |



#### 7-Piece Cushion-Grip Nut Driver Set - 3" Shanks

- Cushion-Grip handle allows for greater torque and comfort
- General-purpose selection of the most frequently used nut drivers with 3 inch shanks
- Patented Tip-Ident® quickly identifies nut driver and size
- Includes reusable plastic container
- 631M includes rare earth magnet tips

| PART NO | VENDOR PART NO | INCLUDES SIZES (IN)                    |
|---------|----------------|--|
| 631M    | 631M           | 3/16, 1/4, 5/16, 11/32, 3/8, 7/16, 1/2 |
| 87-631S | 631            | 3/16, 1/4, 5/16, 11/32, 3/8, 7/16, 1/2 |



#### 7-Piece Cushion-Grip Nut Driver Set – 6" Shanks



- Cushion-Grip handle allows for greater torque and comfort
- General-purpose selection of the most frequently used nut drivers with 6 inch shanks
- Patented Tip-Ident® quickly identifies nut driver and size
- Includes reusable plastic container

| PART NO | VENDOR PART NO | INCLUDES SIZES (IN)                    |
|---------|----------------|--|
| 87-647L | 647            | 3/16, 1/4, 5/16, 11/32, 3/8, 7/16, 1/2 |



## 2-Piece Cushion-Grip Magnetic Nut Driver Set – 1-1/2" Shanks KLEIN (150)

Rare earth magnetic tip.

| PART NO | VENDOR PART NO | INCLUDES SIZES (IN) |
|---------|----------------|---------------------|
| 87-610M | 610M           | 1/4, 5/16           |

#### **NUT DRIVERS - NUT DRIVER SETS**



### 2-Piece Cushion-Grip Magnetic Nut Driver Set – 3" Shanks

KLEIN 150

| Rare earth | magnetic tip. |
|------------|---------------|
|------------|---------------|

| PART NO | VENDOR PART NO | INCLUDES S |
|---------|----------------|------------|
| 87-630M | 630M           | 1/4, 5/16  |



#### 2-Piece Cushion-Grip Magnetic Nut Driver Set - 6" Shanks



Rare earth magnetic tip.

| PART NO | VENDOR PART NO | INCLUDES SIZES (IN) |
|---------|----------------|---------------------|
| 87-646M | 646M           | 1/4, 5/16           |

#### **NUT DRIVERS - "JIFFY CHUCKS" MAGNETIC HEX-DRIVE CHUCKS**



# 875029 & 875030 "Jiffy Chuck" Magnetic Hex-Drive Chuck Sets



Includes carrying case, four assorted lengths of 1/4" hex-drive chucks, four assorted lengths of 5/16" hex-drive chucks, one 1-3/4" long 3/8"

hex-drive chuck. 875030 also includes quick-change adapter for 3/8" or 5/16" chuck.

| PART NO | DESCRIPTION   |
|---------|---|
| 875029  | Magnetic Hex-Drive Chuck Set - 9-Piece                        |
| 875030  | Magnetic Hex-Drive Chuck Set - 9-Piece w/Quick-Change Adapter |

### "Jiffy Chuck" Magnetic Hex-Drive Chucks - 25 Packs



| PART NO       | DESCRIPTION  |
|---------------|--|
| 86-10224-25PK | Jiffy Chuck - Hex-Drive Chuck - 1/4 in. Hex Opening x 1-3/4 in. long (Pack of 25)  |
| 86-10230-25PK | Jiffy Chuck - Hex-Drive Chuck - 5/16 in. Hex Opening x 1-3/4 in. long (Pack of 25) |



## "Jiffy Chuck" Magnetic Hex-Drive Chucks – Individual Chucks

### **PR**TECH

| PART NO  | DESCRIPTION  | HEX OPENING (IN) | LENGTH (IN) |
|----------|--|------------------|-------------|
| 86-10222 | Jiffy Chuck - Hex-Drive Chuck - 1/4 in. Hex Opening x 1-3/4 in. long   | 1/4              | 1-3/4       |
| 86-10242 | Jiffy Chuck - Hex-Drive Chuck - 1/4 in. Hex Opening x 2-9/16 in. long  | 1/4              | 2-9/16      |
| 86-10257 | Jiffy Chuck - Hex-Drive Chuck - 1/4 in. Hex Opening x 4 in. long       | 1/4              | 4           |
| 86-10261 | Jiffy Chuck - Hex-Drive Chuck - 1/4 in. Hex Opening x 6 in. long       | 1/4              | 6           |
| 86-10228 | Jiffy Chuck - Hex-Drive Chuck - 5/16 in. Hex Opening x 1-3/4 in. long  | 5/16             | 1-3/4       |
| 86-10246 | Jiffy Chuck - Hex-Drive Chuck - 5/16 in. Hex Opening x 2-9/16 in. long | 5/16             | 2-9/16      |
| 86-10265 | Jiffy Chuck - Hex-Drive Chuck - 5/16 in. Hex Opening x 4 in. long      | 5/16             | 4           |
| 86-10269 | Jiffy Chuck - Hex-Drive Chuck - 5/16 in. Hex Opening x 6 in. long      | 5/16             | 6           |



#### **NUT DRIVERS - SLIDE DRIVERS**

Slide driver has both of the most common HVAC nut sizes, 1/4" and 5/16" in one tool. Changes size by pushing or pulling outer slide. A special magnet holds screw securely at both positions.



#### Slider Driver - Bit Driver for Power Drill

Works in either a power drill or with the included 3 inch removable handle.

Bit Driver - Slide Driver





#### Slide Driver with Handle

BD-021

| PART NO | INCLUDES SIZES (IN)          |
|---------|------------------------------|
| HH-011  | Slide Driver - 10 in. Length |
| HH-012  | Slide Driver - 7 in. Length  |
| HH-013  | Slide Driver - 3 in Length   |





#### Flexible Shaft Nut Driver Kit

The ideal tool for getting into those tight spaces; 23-Piece Kit includes:

- 2-1/2 inch flexible driver with heavy-duty flexible shaft
- 8-1/2 inch flexible driver with heavy-duty flexible shaft
- T-handle for better grip
- Nine 6-point sockets
- Five slotted bits
- Three Phillips bits
- Three Torx bits

KLEIN 150

| PARI NU | DESCRIPTION                               |
|---------|---|
| FSND-1  | Flexible Shaft Nut Driver Kit (23 pieces) |

#### **TAPPING TOOLS AND AWLS**



#### Six-in-One Tapping Tool

- Two high-carbon steel taps are secured in reversible holder
- Quickly forms new threads, reforms burred threads and cleans out plaster obstructions
- Taps sizes 6-32, 8-32, 10-32, 10-24, 12-24 and 1/4-20
- Each tap size rethreads to next larger size if threads are stripped

| PART NO   | VENDOR PART NO | DESCRIPTION               |
|-----------|----------------|---------------------------|
| 87-627-20 | 627-20         | Tapping Tool - Six In One |



#### **Cushion-Grip Scratch Awl**

- Professional heavy-duty hard-pointed awl
- Scribes metal, starts screw holes, performs a variety of piercing and punching jobs
- Rigid, chrome-plated, heat-treated, temperedsteel shank has full reinforcing bolster at

handle for extra strength and for handle impact reinforcement

- Internal flanges provide solid shank anchor
- Cushion-Grip handle allows for greater comfort

| PART NO | VENDOR PART NO | DESCRIPTION                |
|---------|----------------|----------------------------|
| 87-650  | 650            | Scratch Awl - Cushion Grip |



DESCRIPTION

Beverage Tool



#### **Beverage Tool**

- Suitable for users from the apprentice to the demanding professional
- Cushion-Grip handle resists slippage and provides the comfort needed for frequent use
- Professionally designed and rigorously tested

KLEIN 150 by an expert team to handle both foreign and domestic applications

- Bottle cap Tip-Ident® allows for quick identification in tool pouches or crowed drawers
- High-quality stainless steel construction

| NAME OF TAXABLE PARTY OF TAXABLE PARTY.  |
|--|
| Charles of the Control of the Contro |
|  |
|  |

#### **Riverting Hammer**

87-98002BT

High-carbon steel round head is forged and hardened; flat striking surface with rounded

98002BT

cross peen; straight-grain American hickory handle is stained and lacquered.

| PART NO | VENDOR PART NO | DESCRIPTION              |
|---------|----------------|--------------------------|
| 821-12  | 821-12         | Riveting Hammer (12 oz.) |

### **WIRE STRIPPERS, CRIMPERS & CUTTING TOOLS**



#### 87-5020F Easy Stripper – Heavy Duty

- Heavy-duty multi-purpose tool; strips, crimps, and cuts
- Self adjusting stripper; includes micro adjust-

ment knob for stripping wire smaller than 24 AWG, and adjustable stop for setting correct wire stripping length

**PR**TECH

**PR®TECH** 

KLEIN (50)

| PART NO  | DESCRIPTION   | OVERALL<br>LENGTH (IN) |       | STRIPS<br>(AWG) |       | CRIMPS<br>NON-INS (AWG) |
|----------|---|------------------------|-------|-----------------|-------|-------------------------|
| 87-5020F | Wire Stripper/Cutter/Crimper (Easy Stripper - Heavy Duty) | 8-1/4                  | 10-24 | 10-24           | 10-22 | 4-22                    |



#### 87-5008F Easy Stripper

87-5008F

Multi-purpose; strips, crimps and cuts

Self-adjusting stripper

| OVERALL<br>Length (IN) | CUTS<br>(AWG) | STRIPS<br>(AWG) | CRIMPS<br>INS (AWG) | CRIMPS<br>Non-INS (AWG) |  |
|------------------------|---------------|-----------------|---------------------|-------------------------|--|
| 0.1/4                  | 10.00         | 10.06           | 10.00               | 10.00                   |  |



#### 87-K1412 (K1412) Wire Strippers/Cutters

Wire Stripper/Cutter/Crimper (Easy Stripper)

- Quickly removes outer jacket of Type NM-B nonmetallic-sheathed cable
- Stripping holes easily remove insulation
- Narrow nose fits into tight places
- Precision shear-type blades for square, clean cuts on solid copper wire

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | STRIPS (AWG) | CABLE SHEARING - NM CABLE | SCREW/BOLT SHEARING SIZE |
|----------|----------------|---------------------|--------------|---------------------------|--------------------------|
| 87-K1412 | K1412          | 7-7/10              | 12-14        | 12/2, 14/2                | 6-32, 8-32               |



#### 87-11045 (11045) & Wire Strippers/Cutters

- Compact lightweight wire-stripping/cutting tool
- Narrow nose fits into tight places
- Spring-loaded for self-opening action
- Wire looping and bending holes
- Hardened steel with precision ground stripping holes
- Do not use for cutting steel wire or bolts

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | STRIPS (AWG)  | CABLE SHEARING - NM CABLE | SCREW/BOLT SHEARING SIZE |
|----------|----------------|---------------------|---------------|---------------------------|--------------------------|
| 87-11045 | 11045          | 6-1/4               | 10-18 (solid) | _                         | _                        |



#### 87-11049 (11049) Wire Strippers/Cutters

- Compact lightweight wire-stripping/cutting tool
- Narrow nose fits into tight places
- Spring-loaded for self-opening action
- Wire looping and bending holes
- Hardened steel with precision ground stripping holes
- Do not use for cutting steel wire or bolts



## **WIRE STRIPPERS, CRIMPERS & CUTTING TOOLS**



#### 87-11055 (11055) Wire Strippers/Cutters



- Curved handles help reach into confined areas
- Spring-loaded for self-opening action
- Handy closure lock for convenient storage
- Strong gripping serrated nose for easy bend-

ing, shaping and pulling of wire

 Precision shear-type blades for clean cuts on solid and stranded copper wire

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | STRIPS (AWG)                    | SCREW/BOLT SHEARING SIZE |
|----------|----------------|---------------------|---------------------------------|--------------------------|
| 87-11055 | 11055          | 7-1/8               | 10-18 (solid), 12-20 (stranded) | 6-32, 8-32               |



#### 87-11057 (11057) Wire Strippers/Cutters



- Curved handles help reach into confined areas Spring-loaded for self-opening action
- Precision shear-type blades for clean cuts on solid and stranded copper wire
- easy bending, shaping and pulling of wire Handy closure lock for convenient storage

| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | STRIPS (AWG)                    | SCREW/BOLT SHEARING SIZE |
|----------|----------------|---------------------|---------------------------------|--------------------------|
| 87-11057 | 11057          | 7-1/8               | 20-30 (solid), 22-32 (stranded) | 6-32 8-32                |



#### 87-1011 (1011) Wire Strippers/Cutters

- Scissors action of 1/2 inch wide cutter makes clean cuts with little effort
- Spring-loaded for self-opening action

| <ul> <li>Serrated nose jaws to bend,</li> </ul> |        |      |
|---|--------|------|
| shape or pull wire; holes for looping           | g wire | ends |





#### 87-1001 (1001) Multi-Purpose Electrician's Tool

- Crimps, cuts and strips; cleanly shears bolts Left and right-hand holes near
- Two wire cutters; one at tip the other halfway back near stripping holes.
- Pivot nut adjusts tension

- tip for looping wire ends
- Wire cutter in nose and below pivot
- Crimping dies color-coded for easy identification

| PART NO | VENDOR<br>Part no | OVERALL<br>Length (In) | STRIPS (AWG)                   | CRIMPS<br>Insulated (AWG) | CRIMPS<br>Non-insulated (AWG | SCREW/BOLT<br>G) SHEARING SIZE |
|---------|-------------------|------------------------|--------------------------------|---------------------------|------------------------------|--------------------------------|
| 87-1001 | 1001              | 8-1/2                  | 8-22 (solid), 10-26 (stranded) | 10-22                     | 10-22                        | 4-40, 6-32, 8-32, 10-24, 10-32 |



#### 87-1010 (1010) Multi-Purpose Electrician's Tool – Long-Nose

- Crimps, cuts and strips; cleanly shears bolts
- Narrow serrated pliers nose to pull, loop and bend wire
- Long curved cutting blade
- · Cutters/strippers are in front of the pivot for maximum ease-of-use into tight spaces

| PART NO | VENDOR<br>Part no | OVERALL<br>Length (In) | STRIPS (AWG) | CRIMPS<br>Insulated (AWG) | CRIMPS<br>Non-insulated (AWG) | SCREW/BOLT<br>Shearing Size          |
|---------|-------------------|------------------------|--------------|---------------------------|-------------------------------|--------------------------------------|
| 87-1010 | 1010              | 8-1/4                  | 8-22         | 10-22                     | 10-22                         | 4-40, 5-40, 6-32, 8-32, 10-24, 10-32 |



#### 87-1005 (1005) Crimping/Cutting Tool -**Insulated/Non-Insulated Terminals**

- Tapered nose design for confined spaces
- Special hardened wire cutter in nose
- · Crimping die marked for insulated and noninsulated solderless terminals and connectors

| PA | RT NO  | VENDOR<br>PART NO | OVERALL<br>Length (In) | STRIPS (AWG) | CRIMPS<br>Insulated (AWG) | CRIMPS<br>Non-insulated (AWG) |
|----|--------|-------------------|------------------------|--------------|---------------------------|-------------------------------|
| 87 | 7-1005 | 1005              | 9-3/4                  | _            | 10-22                     | 10-22                         |



#### 87-1006 (1006) Crimping/Cutting Tool -**Non-Insulated/Insulated Terminals**

 Designed for crimping non-insulated solderless terminals and connectors

- Tapered nose for working in confined spaces
- Special hardened wire cutter in nose

| PART NO | VENDOR<br>PART NO | OVERALL<br>Length (IN) | STRIPS (AWG) | CRIMPS<br>Insulated (AWG) | CRIMPS<br>Non-insulated (AWG) |
|---------|-------------------|------------------------|--------------|---------------------------|-------------------------------|
| 87-1006 | 1006              | 9-3/4                  | _            | _                         | 10-22                         |

### **WIRE STRIPPERS, CRIMPERS & CUTTING TOOLS**



#### 87-D275-5 (D275-5) Lightweight Flush Diagonal-Cutting **Electronics Pliers**



KLEIN 150

- Shear cutting greatly reduces cutting effort and minimizes fly-off
- Cushioned grips and steel return spring for

increased comfort during repetitive cutting Ultra slim profile increases access in confined areas

| PART NO   | VENDOR PART NO | OVERALL LENGTH (IN) | CUTS (AWG)) |
|-----------|----------------|---------------------|-------------|
| 87-D275-5 | D275-5         | 5                   | Up to 18    |



#### 87-63050 (63050) High-Leverage Cable Cutters



- High-leverage design for exceptional cutting
- Precision one-hand shearing action
- Perfect for working in confined spaces

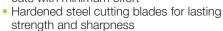
| PART NO  | VENDOR PART NO | OVERALL LENGTH (IN) | CABLE CUTTING CAPACITY   |
|----------|----------------|---------------------|--|
| 87-63050 | 63050          | 9-1/2               | 4/0 aluminum, 2/0 soft copper, 100 pair 24 AWG communications wire |



#### 63060 Ratcheting Cable Cutters

- High-leverage ratchet mechanism for singlehanded cutting of copper and aluminum cables, leaving no burrs or sharp edges
- Patented two-step ratchet mechanism requires fewer strokes per cut
- Quick release lever opens blades easily in every cutting position. (Allows removal of the cable before completion of cut)
- Precision ratcheting mechanism holds cable

| tight | and  | allows | rapid,  | straight |
|-------|------|--------|---------|----------|
| cuts  | with | minimu | ım effa | ort      |



- Plastic covered handles with hand guards for comfort and firm grip
- Locking lever keeps handles closed for easy transport; fits in a toolbox or bag

| PART NO | VENDOR PART NO | OVERALL LENGTH (IN) | CABLE CUTTING CAPACITY |
|---------|----------------|---------------------|------------------------|
| 63060   | 63060          | 10-1/4              | _                      |

### **SNIPS**

#### **AVIATION SNIPS - OFFSET - KLEIN TOOLS**



Offset snips flow material away from blades making long cuts easier and cut tighter curves.



#### 87-2100L (2100L) Offset Aviation Snips – Left

| PART NO  | VENDOR  | OVERALL     | CUTTING     | CUTTING | METAL THICKNESS COLD       | METAL THICKNESS         |
|----------|---------|-------------|-------------|---------|----------------------------|-------------------------|
|          | Part no | Length (IN) | Length (IN) | Pattern | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-2100L | 2100L   | 9-1/2       | 1-1/4       | Left    | 18                         | 22                      |



#### 87-2101R (2101R) Offset Aviation Snips – Right

| PART NO  | VENDOR<br>Part no | OVERALL<br>Length (In) | CUTTING<br>Length (In) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|----------|-------------------|------------------------|------------------------|--------------------|--|--|
| 87-2101R | 2101R             | 9-1/2                  | 1-1/4                  | Right              | 18   | 22   |



#### 87-2100S (2100S) Offset Aviation Snips – Straight

| PART NO  | VENDOR<br>Part no | OVERALL<br>Length (In) | CUTTING<br>Length (IN) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|----------|-------------------|------------------------|------------------------|--------------------|--|--|
| 87-2100S | 2102S             | 9-1/2                  | 1-1/2                  | Straight           | 18   | 22   |

### **SNIPS**

#### **AVIATION SNIPS - OFFSET - MIDWEST**



Offset snips flow material away from blades making long cuts easier and cut tighter curves.



#### 87-P6510L (P6510L) Offset Aviation Snips - Left

| 6 | PART NO   | VENDOR<br>Part no | OVERALL<br>Length (In) | CUTTING<br>Length (IN) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|---|-----------|-------------------|------------------------|------------------------|--------------------|--|--|
|   | 87-P6510L | P6510L            | 10                     | 1-1/4                  | Left               | 18   | 22   |



### 87-P6510R (P6510R) Offset Aviation Snips – Right

| PART NO   | VENDOR<br>Part no | OVERALL<br>Length (IN) | CUTTING<br>Length (IN) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|-----------|-------------------|------------------------|------------------------|--------------------|--|--|
| 87-P6510R | P6510R            | 10                     | 1-1/4                  | Right              | 18   | 22   |



#### 87-P6510S (P6510S) Offset Aviation Snips - Straight

| PAI | RT NO    | VENDOR<br>Part no | OVERALL<br>Length (In) | CUTTING<br>Length (In) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |  |
|-----|----------|-------------------|------------------------|------------------------|--------------------|--|--|--|
| 87  | '-P6510S | P6510S            | 10                     | 1-1/4                  | Straight           | 18   | 22   |  |

### **AVIATION SNIPS - OFFSET - MIDWEST (SPECIAL HARDNESS/HEAVY DUTY)**

Specially heat-treated steel extends blade life cutting hardened sheet metals such as stainless steel, Inconel and titanium.





#### 87-SSP6716L (SSP6716L) Offset Aviation Snips - Left

| ) | PART NO     | VENDOR<br>PART NO | OVERALL<br>LENGTH (IN) | CUTTING<br>LENGTH (IN) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>Stainless Steel (Gauge) |
|---|-------------|-------------------|------------------------|------------------------|--------------------|--|--|
|   | 87-SSP6716L | SSP6716L          | 10                     | 1-3/8                  | Left               | _  | 22   |



#### **AVIATION SNIPS - STANDARD - MIDWEST**





#### 87-P6716L (P6716L) Standard Aviation Snips – Left

| PART NO   | VENDOR<br>Part no | OVERALL<br>Length (IN) | CUTTING<br>LENGTH (IN) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|-----------|-------------------|------------------------|------------------------|--------------------|--|--|
| 87-P6716L | P6716L            | 10                     | 1-3/8                  | Left               | 18   | 22   |



#### 87-P6716R (P6716R) Standard Aviation Snips - Right

| • | PART NO   | VENDOR<br>Part no | OVERALL<br>Length (In) | CUTTING<br>Length (In) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|---|-----------|-------------------|------------------------|------------------------|--------------------|--|--|
|   | 87-P6716R | P6716R            | 10                     | 1-3/8                  | Right              | 18   | 22   |



#### 87-P6716S (P6716S) Standard Aviation Snips - Straight

| PART NO   | VENDOR  | OVERALL     | CUTTING     | CUTTING  | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|-------------|----------|----------------------------|-------------------------|
|           | Part no | LENGTH (IN) | Length (IN) | Pattern  | Rolled Sheet Metal (Gauge) | Stainless Steel (Gauge) |
| 87-P6716S | P6716S  | 10          | 1-1/2       | Straight | 18                         | 22                      |

### **SNIPS**

#### **AVIATION SNIPS - UPRIGHT - MIDWEST**



Right angle blades make cutting complete circles easier in tight spaces using a push or pull motion.





| PART NO   | VENDOR  | OVERALL     | CUTTING     | CUTTING | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|-------------|---------|----------------------------|-------------------------|
|           | Part no | LENGTH (IN) | Length (IN) | Pattern | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-P6900L | P6900-L | 8           | 1-1/4       | Left    | 24                         | 28                      |



#### 87-P6900R (P6900R) Upright Aviation Snips – Right

| PART NO   | VENDOR  | OVERALL     | CUTTING     | CUTTING | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|-------------|---------|----------------------------|-------------------------|
|           | Part no | Length (IN) | Length (In) | Pattern | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-P6900R | P6900-R | 8           | 1-1/4       | Right   | 24                         | 28                      |

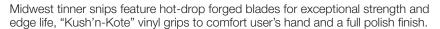
#### **AVIATION SNIPS - LONG STRAIGHT CUT - MIDWEST**



Makes long cuts faster on a variety of materials.

#### 87-P6716A (P6716A) Aviation Snips - Straight (Long Cut)







#### STRAIGHT TINNER SNIPS

Cuts left and right wide curves, and power straight cuts

#### 87-P77S (P77S) Straight Tinner Snips - 7"



| PART NO | VENDOR  | OVERALL     | CUTTING     | CUTTING | METAL THICKNESS COLD       | METAL THICKNESS         |
|---------|---------|-------------|-------------|---------|----------------------------|-------------------------|
|         | Part no | Length (IN) | Length (In) | Pattern | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-P77S | P77S    | 7           | 1-3/4       | _       | 24                         | 28                      |

#### 87-P107S (P107S) Straight Tinner Snips - 10"

| PART NO  | VENDOR  | OVERALL     | CUTTING     | CUTTING | METAL THICKNESS COLD       | METAL THICKNESS         |
|----------|---------|-------------|-------------|---------|----------------------------|-------------------------|
|          | PART NO | Length (IN) | Length (In) | Pattern | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-P107S | P107S   | 10          | 2-1/2       |         | 22                         | 26                      |



#### 87-P127S (P127S) Straight Tinner Snips – 12"

| PART NO  | VENDOR<br>Part no | OVERALL<br>Length (IN) | CUTTING<br>Length (IN) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|----------|-------------------|------------------------|------------------------|--------------------|--|--|
| 87-P127S | P127S             | 12                     | 3                      | _                  | 20   | 22   |

#### **COMBINATION TINNER SNIPS**

Cuts curves easily, and features long cut lengths.



#### 87-P147C (P147C) Combination Tinner Snips - 14"

| ) | PART NO  | VENDOR<br>Part no | OVERALL<br>Length (In) | CUTTING<br>Length (In) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|---|----------|-------------------|------------------------|------------------------|--------------------|--|--|
|   | 87-P147C | P147C             | 14                     | 3-7/8                  | _                  | 18   | 22   |

#### **CIRCULAR "DUCKBILL" TINNER SNIPS**

For cutting tight left or right curves and straight cuts.



#### 87-P77D (P77D) Circular "Duckbill" Tinner Snips – 7"

|   | PART NO | VENDOR<br>PART NO | OVERALL<br>Length (IN) | CUTTING<br>Length (In) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|---|---------|-------------------|------------------------|------------------------|--------------------|--|--|
| , | 87-P77D | P77D              | 7                      | 1-3/4                  | _                  | 26   | 28   |

### **SNIPS**

#### **CIRCULAR "DUCKBILL" TINNER SNIPS**

MIDWEST

For cutting tight left or right curves and straight cuts.



#### 87-P107D (P107D) Circular "Duckbill" Tinner Snips - 10"

| PART NO  | VENDOR<br>Part no | OVERALL<br>Length (In) | CUTTING<br>Length (IN) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|----------|-------------------|------------------------|------------------------|--------------------|--|--|
| 87-P107D | P107D             | 10                     | 2-1/2                  | _                  | 24   | 26   |



#### 87-P127D (P127D) Circular "Duckbill" Tinner Snips – 12"

| ) | PART NO  | VENDOR<br>Part no | OVERALL<br>LENGTH (IN) | CUTTING<br>Length (IN) | CUTTING<br>Pattern | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |  |
|---|----------|-------------------|------------------------|------------------------|--------------------|--|--|--|
|   | 87-P127D | P127D             | 12                     | 3                      | _                  | 22   | 24   |  |

#### **BULLDOG TINNER SNIPS**

Big powerful pattern cuts thick materials, reinforced seams, and multiple layers of sheet materials.



#### 87-P167B (P167B) Bulldog Tinner Snips - 16"

| PART NO  | VENDOR<br>PART NO | OVERALL<br>Length (IN) | CUTTING<br>LENGTH (IN) | CUTTING<br>PATTERN | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>Stainless Steel (Gauge) |
|----------|-------------------|------------------------|------------------------|--------------------|--|--|
| 87-P167B | P167B             | 16                     | 2-1/2                  | _                  | 16   | 18   |

#### **SPECIALTY SNIPS**



#### 87-P657N (P657N) Needle Nose Snips

Cuts intricate curves; forged blades for strength and sharpness.



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| PART NO  | VENDOR  | OVERALL     | CUTTING     | CUTTING | METAL THICKNESS COLD       | METAL THICKNESS         |
|----------|---------|-------------|-------------|---------|----------------------------|-------------------------|
|          | Part no | Length (In) | Length (IN) | Pattern | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-P657N | P657N   | 6-1/2       | 1-1/4       | _       | 24                         | 28                      |



#### 87-2103 (2103) Bulldog/Notch Snips

| PART NO | VENDOR  | OVERALL     | CUTTING     | CUTTING | METAL THICKNESS COLD       | METAL THICKNESS         |
|---------|---------|-------------|-------------|---------|----------------------------|-------------------------|
|         | Part no | Length (In) | Length (IN) | Pattern | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-2103 | 2103    | Q_1/A       | 7/8         | Notch   | 18                         | 22                      |



#### 87-P6716B (P6716B) Bulldog/Notch Snips

| PART NO   | VENDOR<br>Part no | OVERALL<br>LENGTH (IN) | CUTTING<br>LENGTH (IN) | CUTTING<br>PATTERN | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|-----------|-------------------|------------------------|------------------------|--------------------|--|--|
| 87-P6716B | P6716B            | 9-1/2                  | _                      | Notch              | 16   | 18   |



#### 87-P6300 (P6300) Cable Cutter Snips

Compound leverage handles and M2 tool steel blade inserts, easily cuts heavy cable and wire.

| PART NO  | VENDOR  | OVERALL     | CUTTING     | CUTTING | METAL THICKNESS COLD       | METAL THICKNESS         |
|----------|---------|-------------|-------------|---------|----------------------------|-------------------------|
|          | Part no | Length (In) | Length (IN) | Pattern | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-P6300 | P6300   | 9           | 1/8         | 5/32    | 1/8                        |                         |



#### 87-M1200 (M1200) Replaceable Blade Snips

Use in either hand; cuts straight, as well as wide curves; blades are replaceable.

| 07 141000 | M1200          | Snips - Replaceable Blade - 12 in |
|-----------|----------------|-----------------------------------|
| PART NO   | VENDOR PART NO | DESCRIPTION                       |



#### 87-M1200R (M1200R) Replacement Blades for 87-M1200

| ı | PART NO   | VENDOR PART NO | DESCRIPTION                             |
|---|-----------|----------------|---|
|   | 87-M1200R | M1200R         | Replacement Blades for 87-M1200 (M1200) |



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## **SHEET METAL TOOLS**

#### **SEAMERS**







| PART NO  | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|          | Part no | Length (IN) | Depth (IN) | Width (in) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-86552 | 86552   | 8           | 1-1/4      | 3          | 22                         | 24                      |

#### 87-FCTMS2 (FCTMS2) Seamer - Offset



| PART NO   | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|           | Part no | Length (In) | Depth (IN) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-FCTMS2 | FCTMS2  | 8-1/4       | 1-1/4      | 3-3/16     | 22                         | 26                      |

#### 87-86553 (86553) Seamer - Straight



| PART NO  | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|          | Part no | Length (IN) | Depth (IN) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-86553 | 86553   | 8-3/8       | 1-1/4      | 3          | 22                         | 24                      |

#### 87-FCTMS1 (FCTMS1) Seamer - Straight



| PART NO   | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|           | Part no | Length (IN) | Depth (IN) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-FCTMS1 | FCTMS1  | 8-1/4       | 1-1/4      | 3-3/16     | 22                         | 26                      |

#### 87-FCTMS6 (FCTMS6) Seamer - Straight



| PART NO   | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|           | Part no | Length (IN) | Depth (IN) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-FCTMS6 | FCTMS6  | 8-1/4       | 1-1/4      | 6          | 22                         | 26                      |

#### **NOTCHERS**

## KLEIN 150

### 87-86551 (86551) Notcher

|         | -      | -                 |                 |     |  |
|---------|--------|-------------------|-----------------|-----|--|
|         | VENDOR | THROAT            | NOTCH           | JAW |  |
| DART NO |        | B B B B B 1 (110) | ANOLE (DEODEEO) |     |  |





#### 87-FCTMN1 (FCTMN1) Notcher



| ı | PART NO   | VENDOR<br>PART NO | THROAT<br>Depth (In) | NOTCH<br>Angle (Degrees) | JAW<br>WIDTH (IN) | METAL THICKNESS COLD<br>ROLLED SHEET METAL (GAUGE) | METAL THICKNESS<br>STAINLESS STEEL (GAUGE) |
|---|-----------|-------------------|----------------------|--------------------------|-------------------|--|--|
|   | 87-FCTMN1 | FCTMN1            | 13/16                | 31                       | _                 | 22   | 26   |

#### **CRIMPERS**



### KLEIN 150



#### 87-86550 (86550) Crimper - 5-Blade

| PART NO  | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|          | Part no | Length (IN) | Depth (In) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-86550 | 86550   | 9           | 1-1/2      | 3/4        | 24                         | 28                      |

#### 87-FCTMC5 (FCTMC5) Crimper - 5-Blade



| PART NO   | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|           | Part no | Length (IN) | Depth (IN) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | Stainless Steel (Gauge) |
| 87-FCTMC5 | FCTMC5  | 10          | 1-3/4      | 7/8        | 24                         | 28                      |



#### 87-FCTMC5S (FCTMC5S) Crimper – 5-Blade



| PART NO    | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|------------|---------|-------------|------------|------------|----------------------------|-------------------------|
|            | Part no | Length (IN) | Depth (IN) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-FCTMC5S | FCTMC5S | 9-1/4       | 1-1/4      | 13/16      | 24                         | 28                      |

## **SHEET METAL TOOLS**

#### **SNAP LOCK PUNCHES**



#### 87-FCTML1 (FCTML1) Snap Lock Punch



| PART NO   | VENDOR  | OVERALL     | THROAT     | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|           | Part no | Length (IN) | Depth (In) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-FCTML1 | FCTML1  | 8           | 3/8        | 3/8        | 24                         | 28                      |

#### **FOLDING TOOLS**



#### 87-FCTMF1 (FCTMF1) Folding Tool



| PART NO   | VENDOR  | OVERALL     | FOLD       | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|           | PART NO | Length (In) | Depth (IN) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-FCTMF1 | FCTMF1  | 12          | 3/8, 1     | _          | 24                         | 28                      |



#### 87-FCTMF2 (FCTMF2) Folding Tool



| PART NO   | VENDOR  | OVERALL     | FOLD       | JAW        | METAL THICKNESS COLD       | METAL THICKNESS         |
|-----------|---------|-------------|------------|------------|----------------------------|-------------------------|
|           | Part no | Length (IN) | Depth (IN) | WIDTH (IN) | ROLLED SHEET METAL (GAUGE) | STAINLESS STEEL (GAUGE) |
| 87-FCTMF2 | FCTMF2  | 18          | 3/8, 1     | _          | 24                         | 28                      |

### **DUCT TOOLS**



#### 87-FCTMX1 (FCTMX1) Duct Slitter



Used to scribe a line or pierce and enlarge holes in sheet metal.

| PART NO   | VENDOR PART NO | DESCRIPTION  |
|-----------|----------------|--------------|
| 87-FCTMX1 | FCTMX1         | Duct Slitter |



#### 87-FCTMP1 (FCTMP1) Pipe Duct Cutter - Double Cut



Three hardened steel blades cleanly cut 1/8 inch wide tracks, producing a uniform cut leaving both

edges clean. Suitable for 22 gauge cold-rolled sheet steel and 24 gauge stainless steel.

| PART NO   | VENDOR PART NO | DESCRIPTION                   |
|-----------|----------------|-------------------------------|
| 87-FCTMP1 | FCTMP1         | Pipe Duct Cutter - Double Cut |



#### 87-FCTMD1 (FCTMD1) Duct Stretcher – Offset



Aligns and pulls ductwork together, easing installation of drive cleats. Offset handle protects hand.

| PART NO   | VENDOR PART NO | DESCRIPTION             |
|-----------|----------------|-------------------------|
| 87-FCTMD1 | FCTMD1         | Duct Stretcher - Offset |



#### **Round Hole Duct Cutter**

For use with ductboard from 1 to 1-1/2 inches thick. Cuts 3 to 20 inch diameter openings.

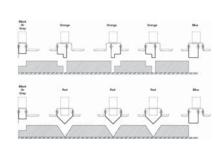
| PART NO  | DESCRIPTION            |
|----------|------------------------|
| 87-40060 | Round Hole Duct Cutter |



#### **Ductboard Hand Tools**

For use with ductboard up to 1 inch thick.

| PART NO  | DESCRIPTION                       |
|----------|-----------------------------------|
| 87-40066 | 90V/Miter Cut Tool - Red          |
| 87-40076 | Corner Tool (Left Only) - Orange  |
| 87-40074 | Corner Tool (Right Only) - Orange |
| 87-40072 | End Cut-Off Tool (4-in-1) - Blue  |
| 87-40068 | Female/Rabbet Tool - Grav         |

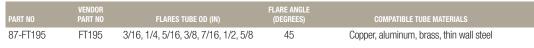


### **FLARING & SWAGING TOOLS**

#### **FLARING TOOLS**

## 87-FT195 (FT195) Flaring Tool





#### 87-FT800FN (FT800FN) Flaring Tool

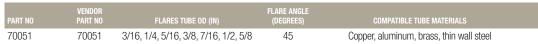


- Engineered to create stronger flare joints for higher pressure R-410A systems
- Includes plastic storage case

| PART NO    | VENDOR<br>Part no | FLARES TUBE OD (IN)                 | FLARE ANGLE<br>(DEGREES) | COMPATIBLE TUBE MATERIALS                |
|------------|-------------------|-------------------------------------|--------------------------|--|
| 87-FT800FN | FT800FN           | 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4 | 45                       | Copper, aluminum, brass, thin wall steel |

### 70051 Flaring Tool





#### 70052 Flaring Tool



| PART NO | VENDOR<br>PART NO | FLARES TUBE OD (IN)            | FLARE ANGLE<br>(DEGREES) | COMPATIBLE TUBE MATERIALS                |
|---------|-------------------|--------------------------------|--------------------------|--|
| 70052   | 70052             | 3/16, 1/4, 5/16, 3/8, 1/2, 5/8 | 45                       | Copper, aluminum, brass, thin wall steel |

## FLARING & SWAGING TOOL SETS

87-FS275 (FS275) Flaring and Swaging Tool Set



|          | VENDOR  |  |   | FLARE ANGLE | -  |
|----------|---------|--|---|-------------|--|
| PART NO  | PART NO | SWAGES TUBE OD (IN)                    | FLARES TUBE OD (IN)                               | (DEGREES)   | COMPATIBLE TUBE MATERIALS                |
| 87-FS275 | FS275   | 3/16, 1/4, 5/16,<br>3/8, 1/2, 5/8, 3/4 | 1/8, 3/16, 1/4, 5/16,<br>3/8, 7/16, 1/2, 5/8, 3/4 | 45          | Copper, aluminum, brass, thin wall steel |

#### 70053 Flaring and Swaging Tool Set



|         |                   |  |   |                          | · · ·                                    |
|---------|-------------------|--|---|--------------------------|--|
| PART NO | VENDOR<br>Part no | SWAGES TUBE OD (IN)                    | FLARES TUBE OD (IN)                               | FLARE ANGLE<br>(DEGREES) | COMPATIBLE TUBE MATERIALS                |
| 70053   | 70053             | 3/16, 1/4, 5/16,<br>3/8, 1/2, 5/8, 3/4 | 1/8, 3/16, 1/4, 5/16,<br>3/8, 7/16, 1/2, 5/8, 3/4 | 45                       | Copper, aluminum, brass, thin wall steel |



#### **SWAGING TOOLS - LEVER**

Extended handle length provides added leverage for ease of operation. Includes swaging tool, expander heads, burr removal tool and carrying case.



| PART NO | SWAGES TUBE OD (IN)            | COMPATIBLE TUBE MATERIALS                |
|---------|--------------------------------|--|
| TLE6    | 3/8, 1/2, 5/8, 3/4, 7/8, 1-1/8 | Copper, aluminum, brass, thin wall steel |



## **FLARING & SWAGING TOOLS**



#### **SWAGING TOOLS - HYDRAULIC**

#### **Hydraulic Swaging Kit** (Hydra-Swage)



Fabricates and expands tubing using hydraulic power. Includes swaging tool, expander heads, burr removal tool and carrying case.

| PART NO | SWAGES TUBE OD (IN)               | COMPATIBLE TUBE MATERIALS                |  |
|---------|-----------------------------------|--|--|
| 71600-A | 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/8 | Copper, aluminum, brass, thin wall steel |  |



## Additional/Replacement Expander Heads for Hydra-Swage Kit Mastercool

Additional larger expander heads available as accessories for the 71600 kit.

| PART NO  | DESCRIPTION                           |
|----------|---------------------------------------|
| 71600-03 | Expander Head - (3/8 in. O.D. Tube)   |
| 71600-04 | Expander Head - (1/2 in. O.D. Tube)   |
| 71600-05 | Expander Head - (5/8 in. O.D. Tube)   |
| 71600-06 | Expander Head - (3/4 in. O.D. Tube)   |
| 71600-07 | Expander Head - (7/8 in. O.D. Tube)   |
| 71600-08 | Expander Head - (1 in. O.D. Tube)     |
| 71600-09 | Expander Head - (1-1/8 in. O.D. Tube) |
| 71600-11 | Expander Head - (1-3/8 in. O.D. Tube) |
| 71600-13 | Expander Head - (1-5/8 in. O.D. Tube) |
| 71600-17 | Expander Head - (2-1/8 in. O.D. Tube) |

#### **SWAGING TOOLS - PUNCH TYPE**



#### 87-70006 (70006) Multi-Step Swaging Tool - Punch Type



| PART NO  | SWAGES TUBE OD (IN)            | COMPATIBLE TUBE MATERIALS                |
|----------|--------------------------------|--|
| 87-70006 | 3/16, 1/4, 5/16, 3/8, 1/2, 5/8 | Copper, aluminum, brass, thin wall steel |



#### 70040 Multi-Step Swaging Tool - Punch Type



| PART NO | SWAGES TUBE OD (IN)      | COMPATIBLE TUBE MATERIALS                |
|---------|--------------------------|--|
| 70040   | 1/4, 5/16, 3/8, 1/2, 5/8 | Copper, aluminum, brass, thin wall steel |



#### 70048 Swaging Tool 5-Piece Set - Punch Type



| PART NO | SWAGES TUBE OD (IN)  | COMPATIBLE TUBE MATERIALS             |
|---------|----------------------|---------------------------------------|
| 70048   | 1/4 5/16 3/8 1/2 5/8 | Conner aluminum brass thin wall steel |

## **TUBE BENDERS & CUTTERS**

#### **TUBING PLIERS**



#### 87-TLPO (TLPO) Tube Pinch-Off Pliers

| PART NO | VENDOR PART NO | DESCRIPTION           |
|---------|----------------|-----------------------|
| 87-TLP0 | TLP0           | Tube Pinch-Off Pliers |



#### 87-TLPP (TLPP) Tube Piercing Pliers - 1/4"

| PART NO | VENDOR PART NO | DESCRIPTION                    |  |
|---------|----------------|--------------------------------|--|
| 87-TLPP | TLPP           | Tube Piercing Pliers - 1/4 in. |  |

### **TUBE BENDERS & CUTTERS**

#### **TUBE CUTTERS**



#### 87-TC127 (TC127) Tube Cutter - Mini



| PART NO  |
|----------|
| 87-TC127 |

| PART NO  | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|----------|----------------|-------------------|--|
| 87-TC127 | TC127          | 1/8 to 5/8        | Copper, aluminum, brass, thin wall steel |



#### 87-TC174 (TC174) Tube Cutter - Medium

CDS\*

| PART NO  | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|----------|----------------|-------------------|--|
| 87-TC174 | TC174          | 3/8 to 1-1/8      | Copper, aluminum, brass, thin wall steel |



#### 87-TC274 (TC274) Tube Cutter - Premium

| PART NO  | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|----------|----------------|-------------------|--|
| 87-TC274 | TC274          | 1/8 to 1-1/8      | Copper, aluminum, brass, thin wall steel |



#### 87-TC312 (TC312) Tube Cutter - Heavy-Duty

| PART NO  | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|----------|----------------|-------------------|--|
| 87-TC312 | TC312          | 1/4 to 1-5/8      | Copper, aluminum, brass, thin wall steel |



#### **87-TCSET (TCSET) Tube Cutter Set**

| PART NO  | VENDOR PART NO | CUTS TUBE OD (IN)                                | DESCRIPTION                              |
|----------|----------------|--|--|
| 87-TCSET | TCSET          | 1/8 to 5/8 (87-TC127)<br>1/8 to 1-1/8 (87-TC274) | Copper, aluminum, brass, thin wall steel |



#### 70027 Tube Cutter - Mini

**▼** Mastercool:

| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|----------------|-------------------|--|
| 70027   | 70027          | 1/8 to 5/8        | Copper, aluminum, brass, thin wall steel |



#### 70029 Tube Cutter - Midi

**▼** Mastercool:

|    |       |                |                   |  | _ | rromi embo gaminy |
|----|-------|----------------|-------------------|--|---|-------------------|
| PA | RT NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |   |                   |
| 70 | 0029  | 70029          | 3/8 to 1-1/8      | Copper, aluminum, brass, thin wall steel |   |                   |



#### 70033 Tube Cutter - Heavy-Duty

**▼** Mastercool<sup>®</sup>

| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|----------------|-------------------|--|
| 70033   | 70033          | 1/8 to 1-1/8      | Copper, aluminum, brass, thin wall steel |



### **70035 Tube Cutter – Heavy-Duty**

**▼** Mastercool:

| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|----------------|-------------------|--|
| 70035   | 70035          | 1/4 to 1-5/8      | Copper, aluminum, brass, thin wall steel |



#### 70037 Tube Cutter - Sliding Ratchet Style







#### 70038 Tube Cutter - Sliding Ratchet Style



| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|----------------|-------------------|--|
| 70038   | 70038          | 1/4 to 3-1/8      | Copper, aluminum, brass, thin wall steel |

### **TUBE BENDERS & CUTTERS**

#### **TUBE CUTTERS**

### 70090 Tube Cutter Set



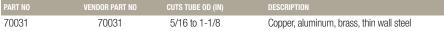


| PART NO | VENDOR PART NO | CUTS TUBE OD (IN)  | DESCRIPTION                              |
|---------|----------------|--|--|
| 70090   | 70090          | 1/8 to 5/8 (70027)<br>3/8 to 1-1/8 (70029)<br>1/8 to 1-1/8 (70033) | Copper, aluminum, brass, thin wall steel |



#### 70031 Tube Cutter - Ratchet Style







#### 87-70024 (70024) Tube Cutter – Mini



VENDOR PART NO Copper, aluminum, brass, thin wall steel 87-70024 70024 1/4 to 1-1/8



#### 87-70001 (70001) Tube Cutter - Premium



| PART NO  | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|----------|----------------|-------------------|--|
| 87-70001 | 70001          | 1/8 to 1-1/4      | Copper, aluminum, brass, thin wall steel |





#### 87-TLRM (TLRM) Reamer Tool



Cleans and deburrs both I.D. and O.D. of tubing from 3/16 inch to 1-3/8 inch.

| PART NO | VENDOR PART NO | DESCRIPTION                        |
|---------|----------------|------------------------------------|
| 87-TLRM | TLRM           | Reamer Tool - 3/16 in. to 1-3/8 in |

#### **TUBE BENDERS - LEVER STYLE**



#### 87-TB04 (TB04) Tube Bender - Lever Style (1/4")



| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |  |
|---------|----------------|-------------------|--|--|
| 87-TB04 | TB04           | 1/4               | Copper, aluminum, brass, thin wall steel |  |



#### 87-TB06 (TB06) Tube Bender - Lever Style (3/8")



| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|----------------|-------------------|--|
| 87-TB06 | TB06           | 3/8               | Copper, aluminum, brass, thin wall steel |



#### 87-TB08 (TB08) Tube Bender - Lever Style (1/2")



| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|----------------|-------------------|--|
| 87-TB08 | TB08           | 1/2               | Copper, aluminum, brass, thin wall steel |



#### 87-TB10 (TB10) Tube Bender – Lever Style (5/8")



| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|----------------|-------------------|--|
| 87-TB10 | TB10           | 5/8               | Copper, aluminum, brass, thin wall steel |

### **TUBE BENDERS & CUTTERS**

#### **TUBE BENDERS - LEVER STYLE**



#### 87-TB12 (TB12) Tube Bender - Lever Style (3/4")



| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|----------------|-------------------|--|
| 87-TB12 | TB12           | 3/4               | Copper, aluminum, brass, thin wall steel |



#### 87-TB368 (TB368) Tube Bender – Lever Style (Multi Size)

CDS\*

| PART NO  | VENDOR PART NO | CUTS TUBE OD (IN) | DESCRIPTION                              |
|----------|----------------|-------------------|--|
| 87-TB368 | TB368          | 1/4, 5/16, 3/8    | Copper, aluminum, brass, thin wall steel |



#### 70069 Tube Bender - Lever Style (Multi Size)

| PART NO | VENDOR PART NO | CUTS TUBE OD (IN)    | DESCRIPTION                              |  |
|---------|----------------|----------------------|--|--|
| 70069   | 70069          | 3/16, 1/4, 5/16, 3/8 | Copper, aluminum, brass, thin wall steel |  |



#### **TUBE BENDERS - RATCHET STYLE**

#### 70070 Tube Bender Kit - Ratchet Style



| PART NO | VENDOR PART NO          | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|-------------------------|-------------------|--|
| 70070   | 3/8, 1/2, 5/8, 3/4, 7/8 | 1/8 to 1-1/8      | Copper, aluminum, brass, thin wall steel |



#### CH-404L Tube Bender Kit - Ratchet Style

| PART NO | VENDOR PART NO          | CUTS TUBE OD (IN) | DESCRIPTION                              |
|---------|-------------------------|-------------------|--|
| CH-404L | 3/8, 1/2, 5/8, 3/4, 7/8 | 1/8 to 1-1/8      | Copper, aluminum, brass, thin wall steel |

#### **DUCT KNIVES & JAB SAWS**



#### 87-TLDKRH (TLDKRH) Duct Knife

Dual non-serrated and serrated edge blade; ergonomic cushioned handle.

| PART NO   | DESCRIPTION                          |
|-----------|--------------------------------------|
| 87-TLDKRH | Duct Knife - 6 in. Blade (Dual Edge) |



#### 87-40062 Duct Knife

For scoring and stripping fiberglass.

| PART NO  | DESCRIPTION              |
|----------|--------------------------|
| 87-40062 | Duct Knife - 4 in. Blade |



#### 875034 Duct Knife

Dual edge blade – both non-serrated; includes sheath.

| PART NO | DESCRIPTION                                   |
|---------|---|
| 875034  | Duct Knife w/Sheath - 6 in. Blade (Dual Edge) |



#### **DK06 Duct Knife**

KLEIN 150

Duel edge blade – one non-serrated and one serrated edge; cushion-grip handle for comfort; includes puncture resistant nylon sheath with belt loop.

| PART NO | DESCRIPTION                  |  |
|---------|------------------------------|--|
| DK06    | Duct Knife - 5-1/2 in. Blade |  |

### **SAWS, KNIVES & BLADES**

#### **DUCT KNIVES & JAB SAWS**



#### 87-725 (725) Jab Saw

- Cuts drywall, wallboard, plywood and plastic
- Triple ground teeth for a fast cut
- Blade cuts in both directions (push and pull)
- Hardened carbon steel blade for durability
- Hardened beveled blade point for scoring and plunge cuts

| Handle structure designed for |  |
|-------------------------------|--|
| strength and durability       |  |

- · Comfort-cushion grip with thumb groove
- Flat-end grip for palming or punching through drywall

| PART NO | VENDOR PART NO | DESCRIPTION     |
|---------|----------------|-----------------|
| 87-725  | 725            | Jab Saw - 6 in. |

#### **UTILITY KNIVES & BLADES**



### 44133 Klein-Kurve Utility Knife

- Retractable blade locks in three positions
- Curved handle design with slip-resistant grip for comfort and ease of use
- No tools required for quick blade change
- Plastic holster with belt clip for convenient use

| <ul> <li>Safety overlap-handle design for</li> </ul> | or |
|--|----|
| heavy-duty cutting                                   |    |



| PART NO | VENDOR PART NO | DESCRIPTION                 |
|---------|----------------|-----------------------------|
| 44133   | 44133          | Utility Knife - Klein Kurve |



#### 87-44101 (44101) Utility Knife Blades (Pack of 5)

- Heavy-duty razor-edged blades
- Universal size fits Klein and most other makes of utility knives
- Blades are reversible for extra life
- Made in the U.S.A.

| PART NO  | VENDOR PART NO | DESCRIPTION                      |
|----------|----------------|----------------------------------|
| 87-44101 | 44101          | Utility Knife Blades (Pack of 5) |





#### 87-701S (701S) Hacksaw

- Blade has three teeth sizes
- Blade converts quickly from 90 to 45 degrees for standard or flush-cut applications
- Set screw allows for storage of extra blades and secures blade for "jab" sawing
- Pivot-lock adjusts blade tension for straighter cuts and longer blade life
- Aluminum finger grip handle and front end
- Thumb guard for two-hand sawing

| PART NO | VENDOR PART NO | DESCRIPTION  |  |
|---------|----------------|--|--|
| 87-701S | 701S           | Dual-Purpose Hacksaw - Golden Tri-Cut 3-in1 Blade (12 in, Blade) |  |

#### **Hacksaw Blades Bi-Metal**

- Special high-speed steel teeth fused to regular carbon-steel body provide superior cutting and longer life
- Fits all 12 inch hacksaws

| <ul> <li>Withstands greater saw tension</li> </ul> |
|--|
| for less blade flexing                             |

Blue finish



| PART NO     | VENDOR PART NO | DESCRIPTION                             | CASE QTY | CASE REQ |
|-------------|----------------|---|----------|----------|
| 87-1224BI-P | 1224BI-P       | Hacksaw Blade - Bi-Metal - 12 in 24 TPI | 10       | Yes      |
| 87-1232BI-P | 1232BI-P       | Hacksaw Blade - Bi-Metal - 12 in 32 TPI | 10       | Yes      |

## **PLASTIC PIPE CUTTERS – PVC, PEX**

70078



#### 87-70078 (70078) Plastic Pipe Cutter - Ratchet Style

Up to to 1-5/8





| 80011 | <b>Plastic</b> | <b>Pipe</b> | Cutter - | <b>Ratchet</b> | <b>Style</b> |
|-------|----------------|-------------|----------|----------------|--------------|





| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | FOR USE ON THE FOLLOWING TUBE MATERIA |
|---------|----------------|-------------------|---------------------------------------|
| 80011   | 80011          | Up to 1-1/2       | PVC. PEX. all other plastic pipe      |



#### 50501 Large Capacity PVC Cutter - Ratchet Style



| PART NO | VENDOR PART NO | CUTS TUBE OD (IN) | FOR USE ON THE FOLLOWING TUBE MATERIALS |
|---------|----------------|-------------------|---|
| 50501   | 50501          | Up to 2           | PVC, PEX and all other plastic pipe     |

### **TENSIONING TOOL**

87-70078



#### **FCTMT1 Tensioning Tool for Wire & Cable Ties**



Provides one-hand operation for tightening all types of nylon ties, including thin designs. Cutter handle trims excess strap.

PVC, PEX, all other plastic pipe

VENDOR PART NO 87-FCTMT1 FCTMT1 Tensioning Tool-Plastic Tie



#### 86570 Tensioning Tool - Nylon Tie



**Nu-Calgon** 

- Tensions up to 65 lbs.
- Maximum tie width of 15/32 in.

- Designed for use with ties rated 120 to 250 lbs. Excess tie material is automatically cut off
- 86570 86570-1 Tensioning Tool - Nylon Tie

### **DRAIN GUN**



#### Gallo CO2 Drain Gun

A lightweight portable tool designed to blow out condensate drain lines. Provides a 800 psi burst of clean oil-free air.

| PART NO | DESCRIPTION                                      |
|---------|--|
| GG-1    | Gallo CO2 Drain Gun                              |
| GGC-12  | Swoosh CO2 Cartridges for Gallo Gun (Pack of 12) |

### A/C DRAIN SUCKER



Clears clogged drain pans easily from the outside. Provides suction or pressure to clogs, removes water from overflowing pans. Kit includes:

Drain sucker pump and hoses

- PurCool shock tabs to clean drain pan and PurCool pan strip for clog prevention
- All fittings for suction or pressure applications

| P/ | ART NO  | DESCRIPTION     |
|----|---------|-----------------|
| 8  | 7-CADS1 | A/C Drain Sucke |

### **LEVELS**



#### **Rare Earth Magnet Torpedo Level**



- Powerful rare earth magnet holds firmly to iron. and steel surfaces; up to five times stronger than strip magnets
- Strong die-cast aluminum frame feature convenient built-in hanging hole; machined edges for accurate readings

| 0 | lo  | o-rea | d١ | wind | low  | simp | lities |
|---|-----|-------|----|------|------|------|--------|
|   | vie | wing  | in | tigh | t ar | eas  |        |

- Grooved edge for pipe and conduit work
- Yellow vials framed with E-Z SEE™ glow-in-thedark material for easier viewing in dimly lit areas

| PART NO    | VENDOR PART NO | DESCRIPTION  |
|------------|----------------|--|
| 87-931-9RE | 931-9RE        | Level - Rare Earth Magnet Torpedo Level (9 in. long) |

### **TAPE MEASURES**



#### Tape Measure - Magnetic Tip



- Comfortable non-slip rubber jacket for easy gripping and impact protection
- Rare earth magnetic tip sticks to iron and steel
- surfaces for simple one person measurements Oversized bold black numbers on first 11" for easy reading

| PART NO | VENDOR PART NO | DESCRIPTION   |
|---------|----------------|---|
| 93125   | 93125          | Tape Measure - 25 ft. x 1 in. wide (Magnetic Single Hook) |



#### **Tape Measure - Double Sided**



- Comfortable non-slip rubber jacket for easy gripping and impact protection
- Double-sided rule for easy reading of elevation,
- flat surface and pipe conduit measurements • Oversized bold black numbers on first 11" for easy reading; 16 and 19" red stud markings

| PART NO | VENDOR PART NO | DESCRIPTION                                       |
|---------|----------------|---|
| 930-25  | 930-25         | Tape Measure - 25 ft. x 1 in. wide (Double-Sided) |



#### **Tape Measure - High-Visibility Case**



- Oversized numbers for easy reading
- High-visibility high-impact orange case makes
- it easy to find in a tool box.

| it dady to inia in a tool box, |
|--------------------------------|
| pouch, and on the jobsite      |
|                                |





#### **Tape Measures - Chrome Case**



- Lightweight, high strength chrome finished case
- Bright yellow blade has clear easy-to-read numerals

| PART NO   | VENDOR PART NO | DESCRIPTION  |
|-----------|----------------|--|
| 87-2212   | 2212           | Tape Measure - 12 ft. x 1/2 in. wide (Chrome)                  |
| 87-2212DX | 2212DX         | Tape Measure - 12 ft. x 1/2 in. wide (Chrome) Decimal-Fraction |
| 87-2316   | 2316           | Tape Measure - 16 ft. x 3/4 in. wide (Chrome)                  |

### **CAULKING GUNS**



#### 87-M0016 Caulking Gun

| PART NO  | DESCRIPTION                   |
|----------|-------------------------------|
| 87-M0016 | Caulking Gun - Cradle - 11 oz |



#### 87-M0017 Caulking Gun

| PART NO  | DESCRIPTION                     |
|----------|---------------------------------|
| 87-M0017 | Caulking Gun - Skeleton - 11 oz |

### **FLASHLIGHTS**



#### Flashlight with Extendable Magnetic Pickup



- Magnets on both grip acts as a third hand
- Magnet on light end for fastener retrieval
- Telescopes from 6-1/2 to 21 inches
- Flexible shaft for hard-to-reach places
- Three super-bright LEDs
- Uses four LR44 batteries (included)

| PART NO | DESCRIPTION   |
|---------|---|
| EMF-1   | Flashlight - Extendable Magnetic  |
| EMF-2   | Flashlight - Extendable Magnetic (Includes Inspection Mirror & Pocket Clip) |



#### LightStar 300 Flashlights

Produces a wide, uniform light pattern, with less of a "hot spot" in the middle. This light pattern provides a much larger usable working area and less reflected light when used at short distances.

- Aircraft grade anodized aluminum
- Dual mode; high (300 lumens), low (100 lumens)
- TERRĂLUX<sup>®</sup> Approximate run times:
- 3 hours on high, 24 hours on low Recessed switch to avoid accidental activation
- Water resistant
- Uses two standard AA batteries
- Limited lifetime warranty

| PART NO       | DESCRIPTION                                       |
|---------------|---|
| TLF-3002AA-BK | LightStar 300 - Titanium Grey - Lifetime Warranty |
| TLF-3002AA-OR | LightStar 300 - Hi-Vis Orange - Lifetime Warranty |

### **TOOL BAGS & CARRIERS**



#### **Canvas Zipper Bag**

- No. 10 canvas bag with strong zipper
- 12-1/2" long x 7" high

| <ul> <li>Convenient storage for pliers,</li> </ul> |
|--|
| wrenches and other tools                           |



87-5139 5139 Canvas Zipper Bag



#### **Canvas Tool Bag**

- Heavy-duty No. 8 natural canvas
- Rivet-reinforced for durability
- Steel-frame mouth with hinge for rugged use
- Stitched and riveted leather handles for comfort and strength

| <ul> <li>Two retaining straps with</li> </ul> | buckles |
|---|---------|
| provide secure closure                        |         |

- Moisture-resistant, vinyl bottom, lower sides
- Protective, non-scratch studs on base
- 16" long x 6" wide x 14" deep

| PART NO    | VENDOR PART NO | DESCRIPTION       |
|------------|----------------|-------------------|
| 87-5102-16 | 5102-16        | Tool Bag - Canvas |



#### **Tool Tote with Shoulder Strap**

- Water-resistant to avoid the buildup of mold and mildew
- Constructed of double-layered 600 x 300 denier polyester to resist wear and tear
- 2 inch wide polypropylene padded carrying handles with comfortable leather wrap

| • | Contoured,   | padded,    | slip-resist | ant      |
|---|--------------|------------|-------------|----------|
|   | shoulder str | rap for ha | ınds-free r | nobility |

- Durable molded bottom with drain holes to prevent wear retention
- Five interior and seven exterior pockets
- 15-1/2" long x 7-1/2" wide x 10" deep

| PARI NU  | VENDUR PART NU | DESCRIPTION |  |
|----------|----------------|-------------|--|
| 87-58888 | 58888          | Tool Tote   |  |



### **Padded Adjustable Shoulder Strap**

- Shoulder strap for canvas tool bags
- Adjustable from both ends for a perfect fit

| PART NO  | VENDOR PART NO | DESCRIPTION                        |
|----------|----------------|------------------------------------|
| 87-58889 | 58880          | Shoulder Stran - Padded Adjustable |





KLEIN 150

## **TOOL BAGS & CARRIERS**



#### **Mobile Phone Holders**



- Fits most mobile phones
- Metal belt clip for simple mounting and removal from belts up to 2 inches wide
- Velcro brand touch fastener

  Closed bottom for convenient storage

| PART NO  | VENDOR PART NO | DESCRIPTION  |
|----------|----------------|--|
| 87-5715M | 5715M          | Mobile Phone Holder - Medium (5-1/2 in. x 2-5/8 in.) |
| 87-5715  | 5715           | Mobile Phone Holder - Large (6-1/2 in. x 3-5/8 in.)  |

### **SPRAYERS**



#### PROTECH Spray Bottle - 32 oz.

**PR**TECH

Multi-purpose sprayer; ideal for small cleaning jobs.

| PART NO | VENDOR PART NO | DESCRIPTION                   | CASE QTY | CASE REQ |
|---------|----------------|-------------------------------|----------|----------|
| 85-S25  | S25            | PROTECH Spray Bottle - 32 oz. | 12       | Yes      |



#### Nu-Calgon Spray Bottle - 24 oz.

Nu-Calgon

Multi-purpose sprayer; ideal for small cleaning jobs.

| PART NO | VENDOR PART NO | DESCRIPTION           | CASE QTY | CASE REQ |
|---------|----------------|-----------------------|----------|----------|
| 4768-W3 | 4768-W3        | Spray Bottle - 24 oz. | 12       | Yes      |



#### PROTECH Pump Sprayer - 48 oz.

**PR**TECH

Adjustable nozzle; thumb lever for flow rate control.

| PART NO     | VENDOR PART NO | DESCRIPTION                   | CASE QTY CA | ASE REQ |
|-------------|----------------|-------------------------------|-------------|---------|
| 85-S1002-48 | S1002-48       | PROTECH Pump Sprayer - 48 oz. | 6           | Yes     |



#### Nu-Calgon Coil Gun Sprayer - 1/2 Gallon

Nu-Calgon

A "hose-end" sprayer that features five different mix ratio settings designed for coil cleaners. Includes a foam wand as well as "quick disconnect" capability.

| PART NO | VENDOR PART NO | DESCRIPTION                   | CASE QTY | CASE REQ |
|---------|----------------|-------------------------------|----------|----------|
| 4774-0  | 4774-0         | Coil Gun Sprayer - 1/2 gallon | 1        | _        |



#### Nu-Calgon Pump Sprayer (50P) - 1/2 Gallon

Nu-Calgon

Adjustable nozzle; thumb lever for flow rate control.

| PART NO | VENDOR PART NO | DESCRIPTION                         | CASE QTY | CASE REQ |
|---------|----------------|-------------------------------------|----------|----------|
| 4770-0  | 4770-0         | Pump Sprayer - 1/2 gallon (No. 50P) | 1        | _        |



#### **PROTECH Poly Sprayer - 1 Gallon**



| PART NO     | VENDOR PART NO | DESCRIPTION                     | CASE QTY CASE REQ |
|-------------|----------------|---------------------------------|-------------------|
| 85-S2608-1G | S2608-1G       | PROTECH Poly Sprayer - 1 gallon | 1 —               |

### **SPRAYERS**



#### **PROTECH Poly Sprayer - 2 Gallon**



| PART NO     | VENDOR PART NO | DESCRIPTION                     | CASE QTY CASE REQ |
|-------------|----------------|---------------------------------|-------------------|
| 85-S2609-2G | S2609-2G       | PROTECH Poly Sprayer - 2 gallon | 1 —               |



#### Nu-Calgon Poly Sprayer (No. 220CP) - 2 Gallon



| PART NO | VENDOR PART NO | DESCRIPTION                         | CASE QTY CASE REQ |
|---------|----------------|-------------------------------------|-------------------|
| 4771-3  | 4771-3         | Poly Sprayer - 2 gallon (No. 220CP) |                   |



#### Nu-Calgon Poly Sprayer (No. 300P) - 3-1/2 Gallon



Includes brass hardware and extension tube.

| PART NO | VENDOR PART NO | DESCRIPTION                            | CASE QTY | CASE REQ |
|---------|----------------|--|----------|----------|
| 4772-0  | 4772-0         | Poly Sprayer - 3-1/2 gallon (No. 300P) | 1        | _        |



#### **Condenser Needle**



This powerful tool connects to a standard garden hose and is designed to clean condenser coils for the inside and out.

| PART NO | DESCRIPTION      |
|---------|------------------|
| CN-03   | Condenser Needle |

### **COILJET PORTABLE COIL CLEANER**



#### CJ-95 CoilJet Portable Coil Cleaning System



Portable power for the inside and out. The CoilJet® from SpeedClean™ makes quick work of cleaning debris and grime from condenser and evaporator coils. Now deliver professional results in a convenient and rechargeable battery powered solution no more garden hoses or pump sprays needed. Delivers a powerful spray of water and cleaning chemical from the included tanks to wash even the dirtiest coils, without damaging sensitive fins. And the small portable size lets you clean coils from the front or back of the coil – a proven method for increasing coil cleaning and system efficiency.

• Powerful 100 psi, 0.5 gpm spray cleans debris

and grime without damaging fins



- Portable and rechargeable; clean coils in hard to reach areas where access to power and water is limited
- Optional spray wand with 90° nozzle lets you clean from the inside out
- Forces dirt and debris back in the direction it
- Deep cycle, 12V, 7A rechargeable battery
- 3.375 gallon water, 1.75 quart chemical capacity
- Includes: CoilJet System, 2 standard spray tips, rechargeable battery, SpeedyFoam cleaner, and AC charger



#### **Foaming Nozzle Assembly**

Creates ultra foaming action to coat coils.



| PART NO | DESCRIPTION             |
|---------|-------------------------|
| CJ-9619 | Foaming Nozzle Assembly |

CJ-95

CoilJet Portable Coil Cleaning System



## **COILJET PORTABLE COIL CLEANER**



#### **Quick Disconnect Adapters**



|           |  | SPEEL |
|-----------|--|-------|
| PART NO   | DESCRIPTION                                    |       |
| CJ-QDN-45 | Quick Disconnect Adapter for CJ-95 - 45 degree |       |
| CJ-QDN-90 | Quick Disconnect Adapter for CJ-95 90 degree   |       |



#### **Quick Disconnect Nozzles**



|              |   | O/ EED OEE/(I'V |
|--------------|---|-----------------|
| PART NO      | DESCRIPTION                                   |                 |
| CJ-QDN-0003R | Quick Disconnect Nozzle for CJ-95 - Pinpoint  |                 |
| CJ-QDN-1503Y | Quick Disconnect Nozzle for CJ-95 - 15 Degree |                 |

#### **Spray Wands**



Optional spray wands allow cleaning from the inside of coils.

| PART NO | DESCRIPTION                          |
|---------|--------------------------------------|
| 8945    | Spray Wand - 36 in. long - 90 degree |
| 8945-24 | Spray Wand - 24 in. long - 90 degree |
| 8945-48 | Spray Wand - 48 in. long - 90 degree |
| 8945-60 | Spray Wand - 60 in. long - 90 degree |



#### **Sectional Stainless Steel Spray Wand**



| PART NO     | DESCRIPTION                       |  |
|-------------|-----------------------------------|--|
| CJ-WWSS     | Sectional Stainless Wand - 36 in. |  |
| CJ-WWSS-EXT | Extension for CJ-WWSS - 16 in.    |  |

#### **Extension Lances**



|         |                                   | SPEEDLLEAN |
|---------|-----------------------------------|------------|
| PART NO | DESCRIPTION                       |            |
| CJ-9657 | Extension Lance Assembly - 36 in. |            |
| CJ-9658 | Extension Lance Assembly - 48 in. |            |
| CJ-9659 | Extension Lance Assembly - 60 in. |            |



#### **Vehicle Adapter for Battery Charger**

Easily recharges the CoilJet on the go.



| PART NO | DESCRIPTION                         |
|---------|-------------------------------------|
| 8944    | Vehicle Adapter for Battery Charger |

## **Battery Charger**







#### Battery Charger (w/Lugs to Charge Battery Outside of Unit)



|         | onargo (mago to onargo pattory outplus or only                | SPEEDCLEAN |
|---------|---|------------|
| PART NO | DESCRIPTION   |            |
| 8024    | Rattery Charger with Lugs (to charge hattery outside of unit) |            |



#### **Battery**



|         | SPEEDCLEAN                    |
|---------|-------------------------------|
| PART NO | DESCRIPTION                   |
| CJ-9689 | Battery for CJ-95 for CoilJet |



## COILJET PORTABLE COIL CLEANER



#### Charger Kit (Includes Battery & Charger)



CJ95-KIT-SB

Charger Kit for CJ-95 (w/charger & battery)

## **ATTIC PRO UTILITY LIFT**

- Adjustable from 14 in. to 24 in.
- 20 foot cable length
- Integrated locking hook
- Lifts up to 250 lbs.

- Sturdy steel construction
- Equipment straps included
- Carrying case included





Attic Pro Utility Lift