I. Introduction
The Dual Head Welder, Part No. 01E27, consists of the following components:

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>NO. REQUIRED</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>25V25 or 25V26 or 24V27 or 25V28</td>
<td>2</td>
<td>&quot;DSH&quot; Welding lead (Standard, Medium, High, or Extra-High Speed)</td>
</tr>
<tr>
<td>09V73-A or 09V73-D</td>
<td>2</td>
<td>&quot;US&quot; Voltage Control (A.C. or D.C.)</td>
</tr>
<tr>
<td>01E16 or 01E17</td>
<td>1</td>
<td>CM-37 Travel Carriage (Standard or Intermediate Speed)</td>
</tr>
<tr>
<td>18V37</td>
<td>1</td>
<td>Horizontal and Vertical Adjustment Assembly</td>
</tr>
<tr>
<td>18V14</td>
<td>1</td>
<td>Composition Hopper</td>
</tr>
<tr>
<td>19V89</td>
<td>2</td>
<td>Small Wire Reel</td>
</tr>
<tr>
<td>25V44</td>
<td>1</td>
<td>Swivel Unit</td>
</tr>
<tr>
<td>25V43</td>
<td>1</td>
<td>Parts Kit for Dual Head Welder</td>
</tr>
<tr>
<td>47W29 and/or 47W30 and/or 48W31</td>
<td>Select a total of six feed rolls from the sizes offered.</td>
<td>Feed Roll for 1/8-In. Wire</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

* Separate Instruction Booklets for Dual Head Welder components are included in this folder. See Figure 1.

II. Assembling the Dual Head Welder
The Dual Head Welder should be assembled as shown in Figure 1. The following procedure is followed:

1. Place the CM-37 Carriage on a firm working surface and mount the Swivel Unit (Item 30, Figure 1) on the carriage.
2. Unscrew the two locking screws from the Swivel Unit and mount the Head and Reel Support (Item 1, Figure 1) on the Swivel Unit using the hardware supplied with the support. (See Figure 1.) Reassemble the locking screws on the Swivel Unit.
3. Take one of the Wire Reels (Item 32, Figure 1); a Spacer (Item 7, Figure 1); and the Control Mounting Bracket (Item 2, Figure 1) and mount them as shown. (Use hardware Items 15, 16, and 17.) Make sure that the Control Mounting Bracket is placed on the proper side of the Head and Reel Support.
4. Mount the Control Bracket Brace (see Figure 1) using hardware Items 20, 21, and 22. After the Brace has been mounted, fasten the other Wire Reel to the Head and Reel Support using hardware Items 14, 15, and 17.
5. Mount the Welding Heads on the Head and Reel Support.
6. Mount the Voltage Controls on the Control Bracket.
7. Fasten the Slide Assembly (Item 31, Figure 1) to the Swivel Unit.
8. Fasten the Nozzle Assembly (Item 5, Figure 1) to the Slide Assembly.
9. For each head take the Wire Tube Assembly (Item 12, Figure 1) and insert the Wire Guide (Item 5, Figure 1); and the Wire Pilot (Item 10 or 11, Figure 1). Place the Insulating Hose (Item 13, Figure 1) on the other end of Wire Tube Assembly. Fasten the Pilot end of the Assembly to the Welding Head Clamp. Fasten the Hose end of the Assembly to the Nozzle Assembly.
10. Insert the Nozzle Tip (Item 3 or 4, Figure 1) into the Nozzle Assembly.
11. Install the Hopper Assembly by mounting one of the Brackets supplied with the Hopper Assembly (see Figure 1). (The other bracket, the right angle clamp and the vertical tube are not used.) Attach the rubber hose to the bottom of the hopper with the clamp provided. Mount the hopper on the horizontal pipe.
   Inside the hopper are two drilled collars. Align the holes in these collars with the corresponding holes in the mounting pipe. Insert in the holes and secure the two cotter pins supplied.
   Clamp the Composition Tube and Pointer Assembly (furnished with the Welding Head Assembly) around the contact nozzle, as shown in Item 25. Insert the hose through the opening in the clamp.
   Insert a piece of pointed welding rod in the clamp and tighten the clamp screw. This rod serves as a guide for following the weld seam.
   If a composition gate is not used, the flow of UNIONMELT composition is controlled by the hopper valve in the bottom of the hopper. Both horizontal and vertical adjustments of the hopper position are provided by the mounting clamp.
12. Mount (Position A or B) the Cable Clamps (Items 23 and 24, Figure 1) on the side of the CM-37 Carriage as shown in Figure 1, using hardware Item 25.
13. Install the Wire Feed Rolls on the Welding Heads as outlined in Item 25.
14. Connect one of the two 09V73 Control Units to the CM-37 Carriage. (The control which is connected to the carriage has control over carriage travel. Choice of which control to connect to the carriage is a matter of customer convenience. The unused pendant cord is left coiled up as illustrated.) The Controls and Welding Heads are interconnected as outlined in Figure 1.
HOPPER SUPPORT MOUNTED HERE

CLAMP POSITION A

CONTROL BRACKET Brace (Supplied with Item 2)

SWIVEL UNIT LOCKING SCREWS

FIG. 1 - ASSEMBLING THE DUAL HEAD WELDER
DUAL HEAD WELDER COMPONENTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUAN.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>FOR PARTS DATA, SEE</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>25V48</td>
<td>Head Reel Support</td>
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</tr>
<tr>
<td>2</td>
<td>1</td>
<td>25V49</td>
<td>Control Mounting Bracket</td>
<td>—</td>
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<tr>
<td>3</td>
<td>2</td>
<td>20N75</td>
<td>5/32-in. Nozzle Tip</td>
<td>—</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>20N86</td>
<td>3/32-in. Nozzle Tip</td>
<td>—</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>20N78</td>
<td>1/8-in. Nozzle Tip</td>
<td>—</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>25V47</td>
<td>Nozzle Assembly</td>
<td>Fig. 2</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>15N60</td>
<td>3/16-in. Wire Guide</td>
<td>—</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>05N88</td>
<td>Wire Reel Spacer</td>
<td>—</td>
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<tr>
<td>8</td>
<td>1</td>
<td>18N68</td>
<td>Nameplate</td>
<td>—</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>23Z19</td>
<td>Caution Plate</td>
<td>—</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>20N57</td>
<td>5/32-in. Wire Pilot</td>
<td>—</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>18N02</td>
<td>1/8-in. Wire Pilot</td>
<td>—</td>
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<tr>
<td>12</td>
<td>2</td>
<td>346672</td>
<td>Wire Tube Assembly</td>
<td>—</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>29W25</td>
<td>Hose</td>
<td>—</td>
</tr>
<tr>
<td>14</td>
<td>4</td>
<td>5/16-in.-18 x 1-3/4 Lg. Socket-Head Cap Screw Steel (C.P.)</td>
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</tr>
<tr>
<td>15</td>
<td>8</td>
<td>5/16-in.-18 Hex Nut Steel (C.P.)</td>
<td>—</td>
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</tr>
<tr>
<td>16</td>
<td>4</td>
<td>5/16-in.-18 x 2-in. Lg. Hex Head Cap Screw (C.P.)</td>
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<tr>
<td>17</td>
<td>8</td>
<td>5/16-in.-125-in. x .078-in. ASA Lock Washer, Steel</td>
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<tr>
<td>18</td>
<td>8</td>
<td>No. 0 x 3/16-in. Lg. Pk Type &quot;U&quot; Round-Head Drive Screw</td>
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<tr>
<td>19</td>
<td>2</td>
<td>No. 10-24 x 5/8-in. Lg. Hex Socket Cone Point Setscrew</td>
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<tr>
<td>20</td>
<td>2</td>
<td>1/4-in.-20 x 1-in. Lg. Socket-Head Cap Screw Steel (C.P.)</td>
<td>—</td>
<td></td>
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<tr>
<td>21</td>
<td>2</td>
<td>1/4-in.-20 Hex Nut Steel (C.P.)</td>
<td>—</td>
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</tr>
<tr>
<td>22</td>
<td>2</td>
<td>1/4 ASA Med. Lock Washer (ST)</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>1</td>
<td>14W82</td>
<td>Inner Clamp</td>
<td>—</td>
</tr>
<tr>
<td>24</td>
<td>2</td>
<td>14W83</td>
<td>Outer Clamp</td>
<td>—</td>
</tr>
<tr>
<td>25</td>
<td>1</td>
<td>1/2-13 x 3-in. Lg. Hex Head Cap Screw, Steel</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

(SUPPLIED WITH ITEM 2)

09V73-A.. "US" Voltage Control A.C. or
09V73-D.. "US" Voltage Control D.C.

1... 01E16... CM-37 Carriage - Standard
     or
1... 01E17... CM-37 Carriage - Intermediate
2... 25V25... "DSH" Head (#8 Gear Train)
     or
2... 25V26... "DSH" Head (#15 Gear Train)
     or
2... 25V27... "DSH" Head (#21 Gear Train)
     or
2... 25V28... "DSH" Head (#38 Gear Train)
     or
2... 47W29... 1/8-in. Feed Roll
     or
2... 47W30... 5/32-in. Feed Roll
     or
2... 48W31... 3/32-in. Feed Roll
30... 1... 25V44... Swivel Unit, Rocker Hinge and Horizontal Racking Assembly

F-9119*
F-6296*
F-6296*
F-6296*
F-6296*
F-6296*
F-6296*
F-6296*
F-6296*

*These parts are included in this folder.

The CM-37 Carriage may be operated on standard OXWELD track or the Carriage may be manually guided by means of Carriage Guide Wheel (Part No. 09V48) without the use of track. Both of these items are accessories and must be purchased separately.
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Welding Rods and Supplies
PUROX Welding and Cutting Apparatus
PREST-O-LITE Welding and Cutting Apparatus
PREST-O-LITE Air-Acetylene Apparatus and Small Tanks
CARBIC Acetylene Generators

ELECTRIC WELDING AND CUTTING EQUIPMENT
HELIARC Welding and Cutting Equipment
LINDE Sigma Welding Equipment
UNIONARC Welding Apparatus and Supplies
UNIONMELT Automatic Welding Apparatus and Supplies

SPECIAL EQUIPMENT
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Plate-Edge Preparation Equipment
Steel-Conditioning Machines
Sub-Zero Cold Treatment Equipment
OXWELD Oxy-Acetylene Cutting Machines
Pressure-Welding Machines
PREST-O-LITE Cylinders, Shells, and Shapes

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LINDE Oxygen U.S.P.
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OXWELD Oxygen Manifolds and Valves

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