



| | | |
|------------------------------------|------------------------------|------------------------------|
| Document Number SPL83632 | Issue Date 9/28/16 | Rev. Date 10/29/19 |
|------------------------------------|------------------------------|------------------------------|

Model VPO and VPOS Priming Pump Service Parts List

Configuration as used with VAP Priming Valves

Index:

| Priming Pump | | | Pump Transmission or P.T.O. Model <i>(Located on Serial Plate)</i> | | | | See Page | | | | | | | | |
|--------------|---|-------------|---|--------------------------------------|--------|-------|---|-------------------------|--------------------|-----------------------------|--------------------------------------|-------------------------|-----------------------------|---------------------|------|
| Model | Mounting Location | | Pump Transmission | | P.T.O. | | Mounting | Priming Pump Components | | Panel Switch and Wiring | | Prime-Safe™ Lubricant | | | |
| | | | Series | Model | Series | Model | | Exploded View | Cross-Section View | Standard Push-Button Switch | Optional Oversize Push-Button Switch | Configuration when Used | Configuration when Not Used | | |
| VPO | On Pump Transmission or P.T.O. | | C20 | C20B C20C C20D C20E C20F | - | - | 2, 3 | 10, 11 | 12, 13 | 14, 15 | 18, 19 | 22, 23 | 22, 23 | | |
| | | | | - | - | TC10 | TC10B TC10C TC10D TC10E TC10F | | | | | | | 2, 3 or 4, 5* | |
| | | | - | - | TC21 | TC21 | - | | | | | | | - | 2, 3 |
| | | | C21 | C21 | - | - | 2, 3 | | | | | | | | |
| | | | QC | QC | - | - | 6, 7 | | | | | | | | |
| W | WB WBX | - | - | 8, 9 | | | | | | | | | | | |
| VPOS | Separately Mounted (Not on Transmission or P.T.O.) | Single Pump | All | | | | - | 10, 11 | 12, 13 | 16, 17 | 20, 21 | | | | |
| | | Dual Pumps | All | | | | - | | | | | | | | |

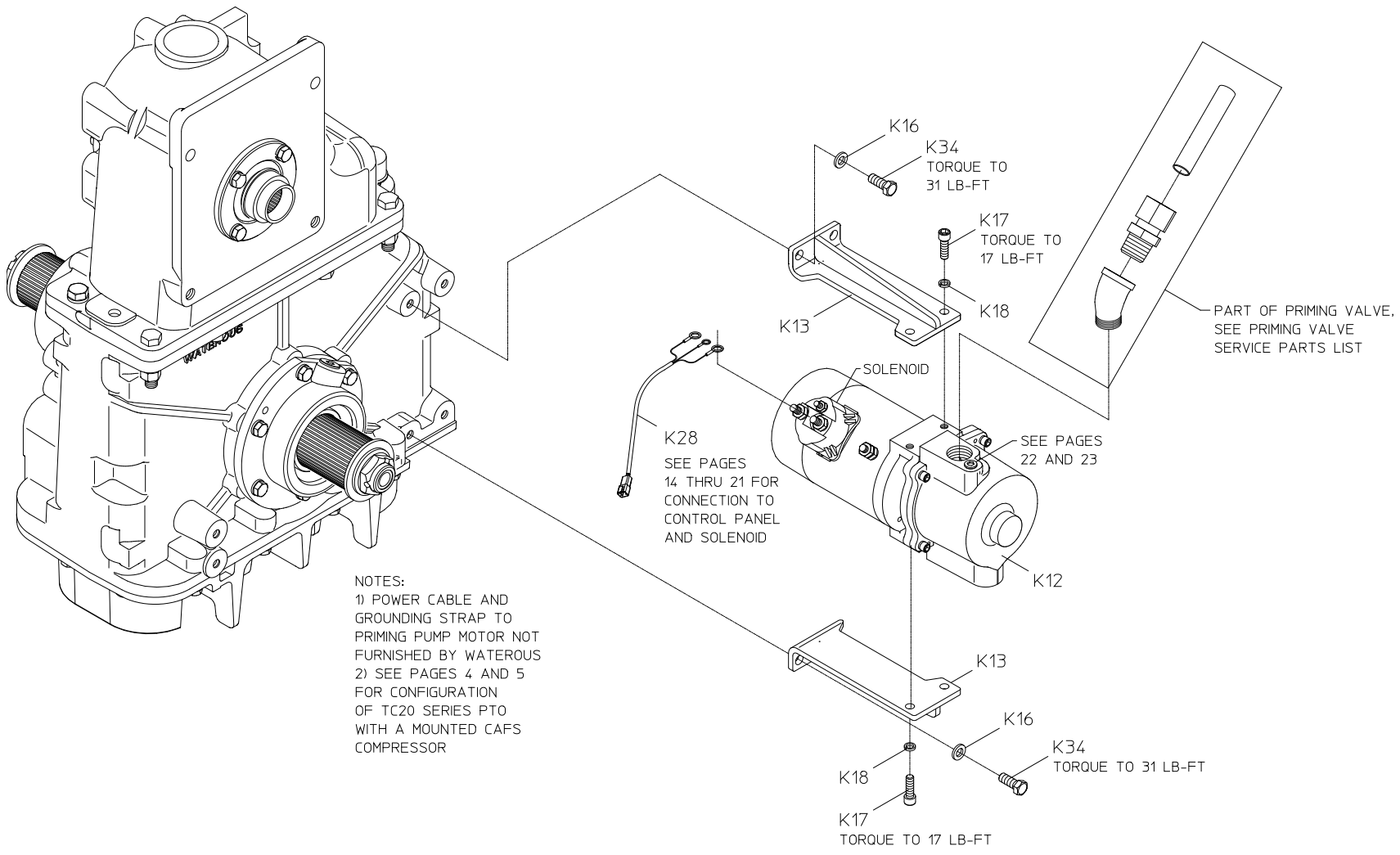
*Note: Pages 4 and 5 apply to TC20 Series PTO's with a mounted CAFS compressor

Model VPO

Mounting on C20 and C21Series Transmissions and TC20 and TC21Series P.T.O.'s

| REF. NO. | DESCRIPTION |
|----------|----------------------|
| K12 | Primer Sub-assembly |
| K13 | Mounting Bracket |
| K16 | Lock Washer, 3/8 in. |

| REF. NO. | DESCRIPTION |
|----------|----------------------------------|
| K17 | Socket Hd Screw, 5/16-18 x 1 in. |
| K18 | Lock Washer 5/16 in. |
| K28 | Cable Extension |
| K34 | Hex Hd Screw, 3/8-16 x 1 in. |



NOTES:
 1) POWER CABLE AND GROUNDING STRAP TO PRIMING PUMP MOTOR NOT FURNISHED BY WATEROUS
 2) SEE PAGES 4 AND 5 FOR CONFIGURATION OF TC20 SERIES PTO WITH A MOUNTED CAFS COMPRESSOR

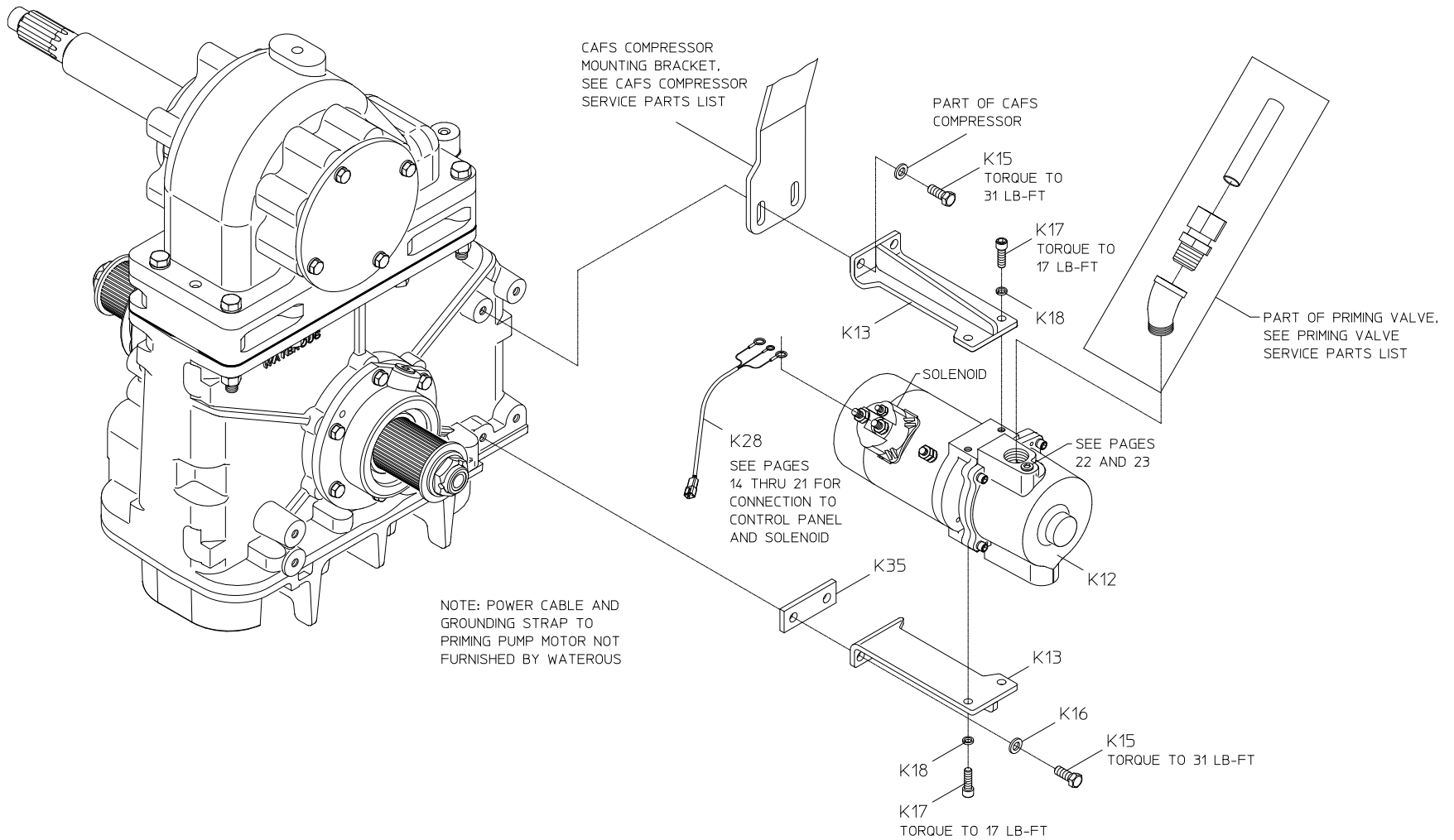
**MODEL VPO MOUNTING ON
 C20 AND C21 SERIES TRANSMISSIONS
 AND TC20 AND TC21 SERIES PTO'S**

Model VPO

Mounting on TC20 Series P.T.O.'s with a Mounted CAFS Compressor

| REF. NO. | DESCRIPTION |
|----------|----------------------------------|
| K12 | Primer Sub-assembly |
| K13 | Mounting Bracket |
| K15 | Hex Hd Screw, 3/8-16 x 1-1/4 in. |
| K16 | Lock Washer, 3/8 in. |

| REF. NO. | DESCRIPTION |
|----------|----------------------------------|
| K17 | Socket Hd Screw, 5/16-18 x 1 in. |
| K18 | Lock Washer 5/16 in. |
| K28 | Cable Extension |
| K35 | Bottom Mounting Bracket Spacer |

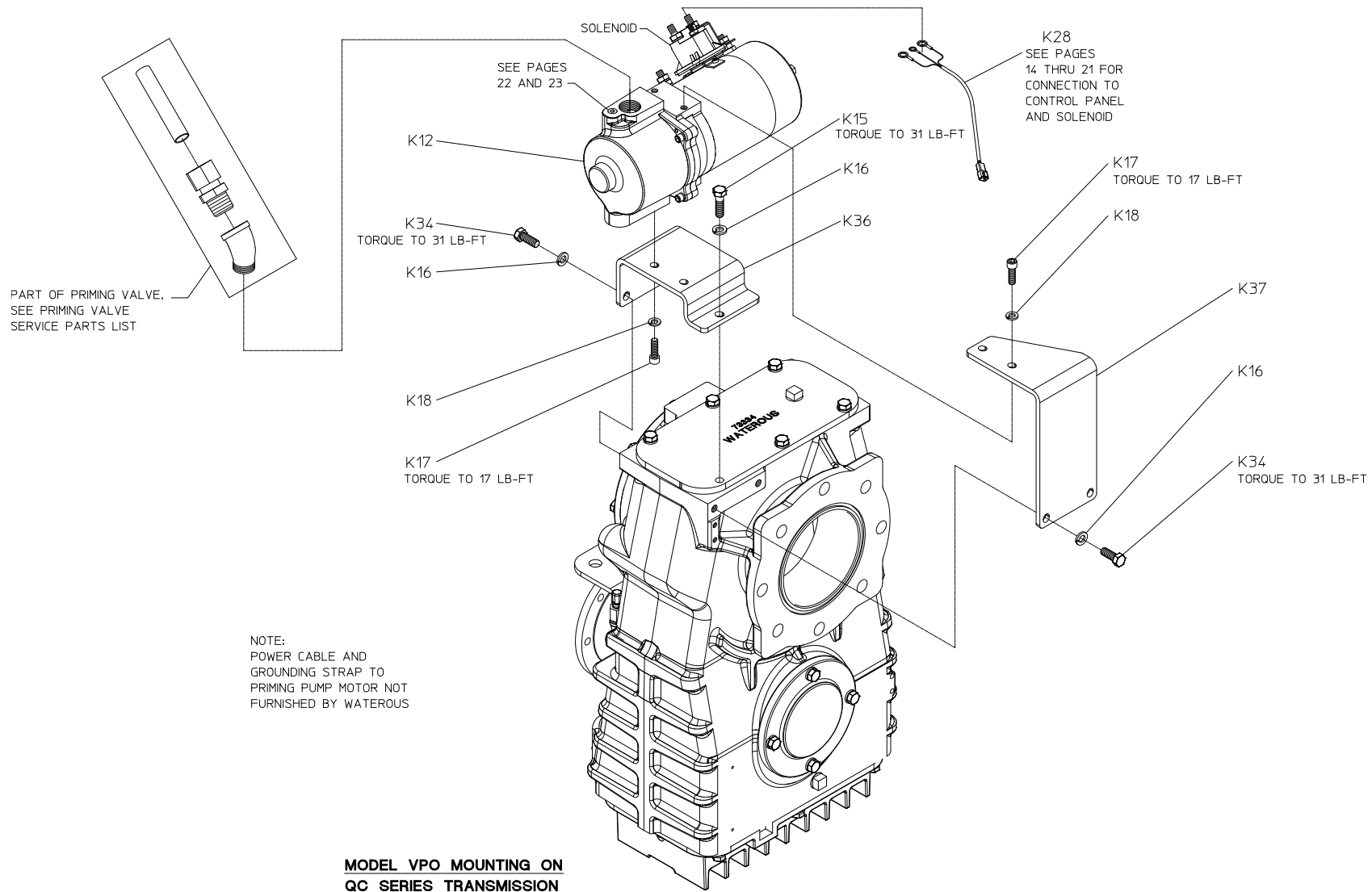


**MODEL VPO MOUNTING ON
TC20 SERIES PTO WITH A MOUNTED CAFS COMPRESSOR**

Model VPO
Mounting on QC Series Transmission

| REF. NO. | DESCRIPTION |
|-----------------|----------------------------------|
| K12 | Primer Sub-assembly |
| K15 | Hex Hd Screw 3/8-16 x 1-1/4 in. |
| K16 | Lock Washer, 3/8 in. |
| K17 | Socket Hd Screw, 5/16-18 x 1 in. |
| K18 | Lock Washer 5/16 in. |
| K 28 | Cable Extension |

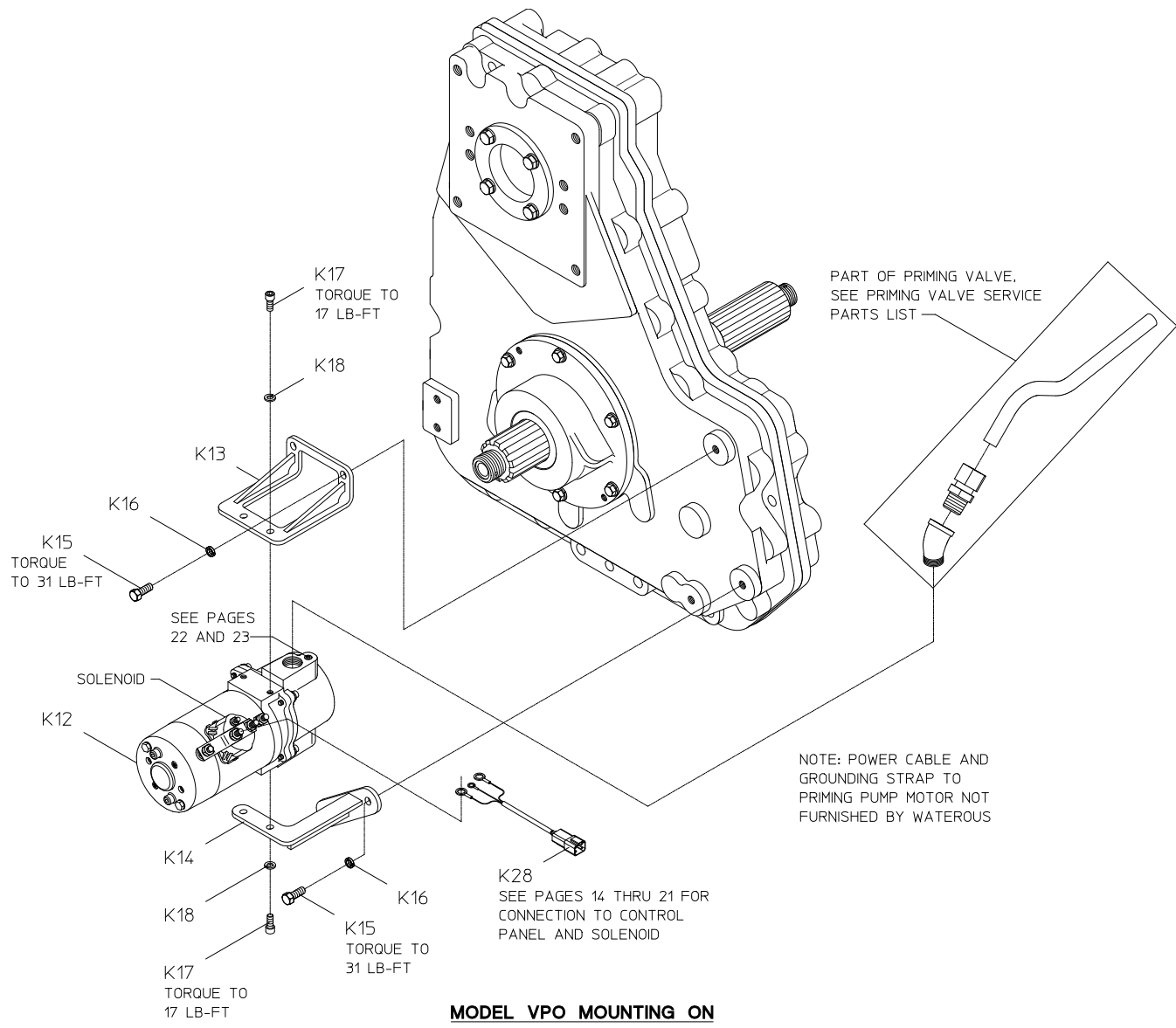
| REF. NO. | DESCRIPTION |
|-----------------|------------------------------|
| K34 | Hex Hd Screw, 3/8-16 x 1 in. |
| K36 | Lower Primer Bracket |
| K37 | Upper Primer Bracket |
| K38 | 3/4 NPT x 3/4 Tubing Fitting |



Model VPO
Mounting on W Series Transmissions

| REF. NO. | DESCRIPTION |
|---------------------|----------------------------------|
| K12 | Primer Sub-assembly |
| K13 | Mounting Bracket |
| K14 | Bottom Mounting Bracket |
| K15 | Hex Hd Screw, 3/8-16 x 1-1/4 in. |

| REF. NO. | DESCRIPTION |
|---------------------|----------------------------------|
| K16 | Lock Washer, 3/8 in. |
| K17 | Socket Hd Screw, 5/16-18 x 1 in. |
| K18 | Lock Washer 5/16 in. |
| K28 | Cable Extension |



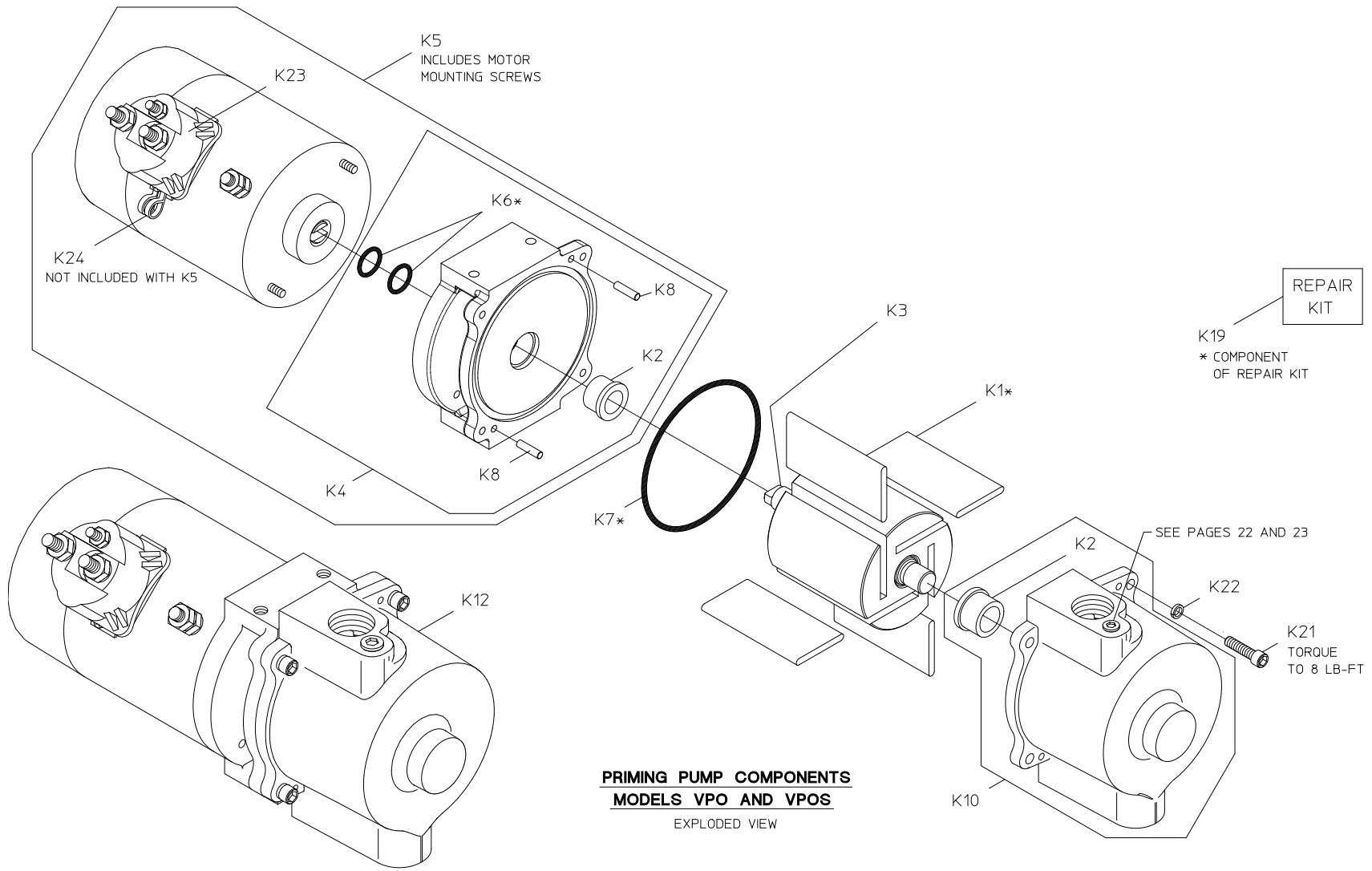
**MODEL VPO MOUNTING ON
W SERIES TRANSMISSIONS**

Priming Pump Components

Models VPO and VPOS (Exploded View)

| REF. NO. | DESCRIPTION |
|-------------|---|
| K1 | Vane |
| K2 | Oilite Bearing |
| K3 | Rotor Assembly (Includes Shaft) |
| K4 | Adapter Assembly, (Includes K2, K6 and K8) |
| K5 | Motor Assembly (Includes K2, K4, K6, K8, K23 and (2) 1/4-20 x 6-1/2 in. Hex Hd Mounting Screws) |
| K6 | O-ring, .612 x .818 in. |
| K7 | O-ring, 3.859 x 4.137 in. |
| K8 | Dowel Pin, 3/15 x 3/4 in. |

| REF. NO. | DESCRIPTION |
|-------------|---------------------------------|
| K10 | Housing Assembly (Includes K2) |
| K12 | Primer Sub-assembly |
| K19 | Repair Kit |
| K21 | Socket Hd Screw, 1/4-20 x 1 in. |
| K22 | Lock Washer, 1/4 in. |
| K23 | Solenoid |
| K24 | Wire Clamp |



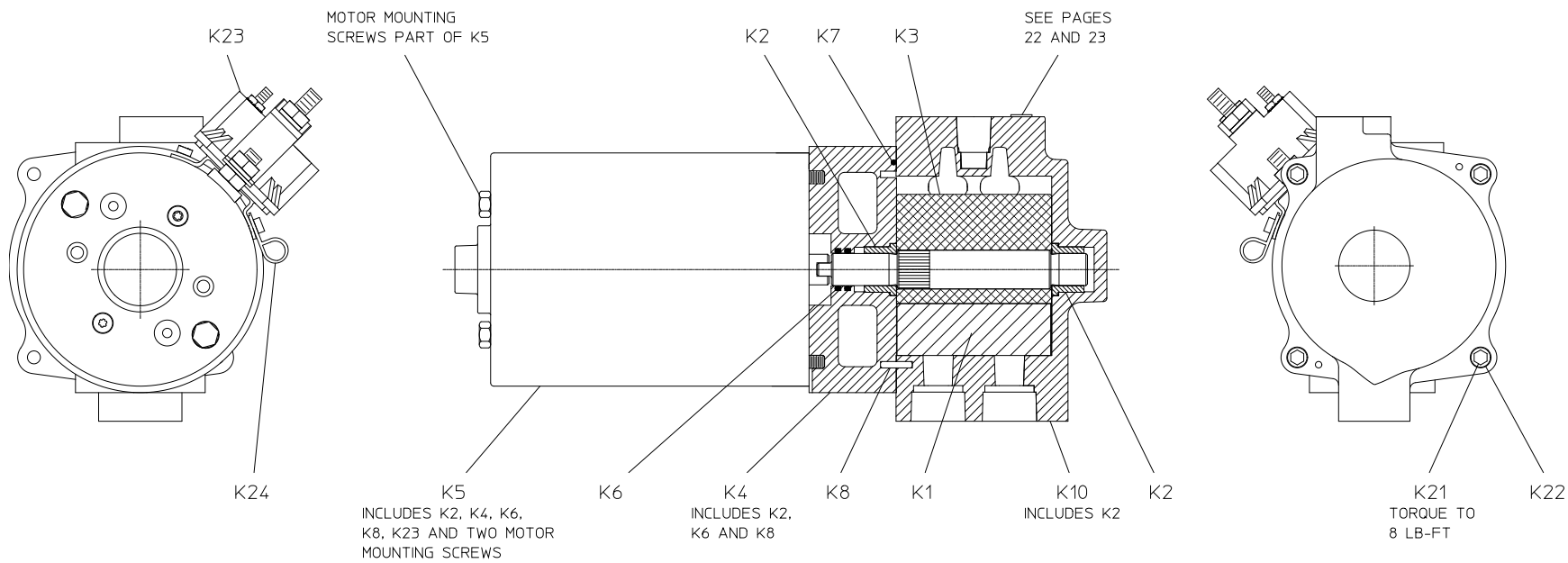
PRIMING PUMP COMPONENTS
MODELS VPO AND VPOS
 EXPLODED VIEW

Priming Pump Components

Models VPO and VPOS (Cross-Section View)

| REF. NO. | DESCRIPTION |
|-------------|--|
| K1 | Vane |
| K2 | Oilite Bearing |
| K3 | Rotor Assembly (Includes Shaft) |
| K4 | Adapter Assembly, (Includes K2, K6 and K8) |
| K5 | Motor Assembly (Includes K2, K4, K6, K8, K23 and(2) 1/4-20 x 6-1/2 in. Hex Hd Mounting Screws) |
| K6 | O-ring, .612 x .818 in. |
| K7 | O-ring, 3.859 x 4.137 in. |
| K8 | Dowel Pin, 3/15 x 3/4 in. |

| REF. NO. | DESCRIPTION |
|-------------|---------------------------------|
| K10 | Housing Assembly (Includes K2) |
| K21 | Socket Hd Screw, 1/4-20 x 1 in. |
| K22 | Lock Washer, 1/4 in. |
| K23 | Solenoid |
| K24 | Wire Clamp |

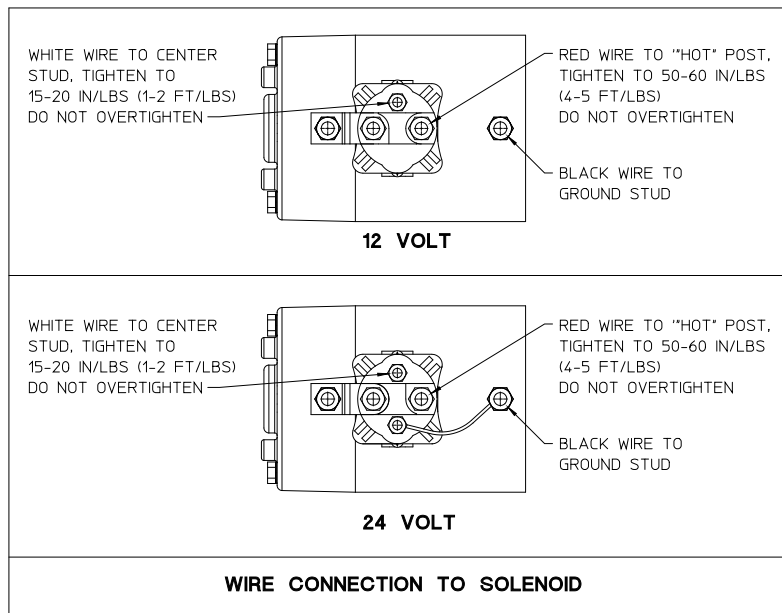
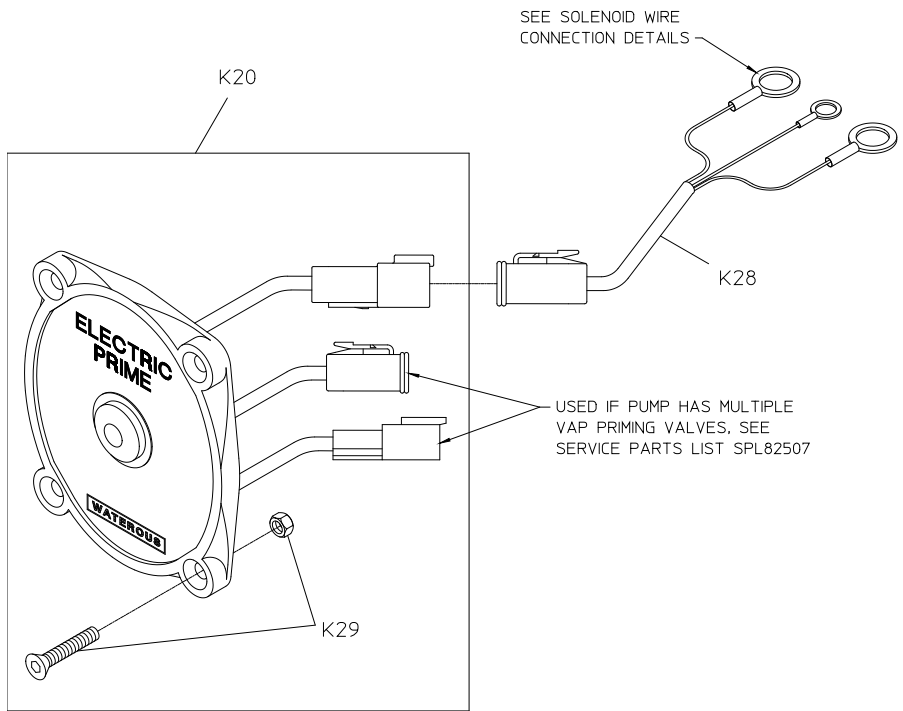


PRIMING PUMP COMPONENTS
MODELS VPO AND VPOS
 CROSS-SECTION VIEW

Panel Switch and Wiring
Standard Push-Button Switch – Single Primer

| REF. NO. | DESCRIPTION |
|-------------|---|
| K20 | Control Panel with Integral Switch (Includes K29 Mounting Screw and Nuts) |
| K28 | Cable Extension |

| REF. NO. | DESCRIPTION |
|-------------|--|
| K29 | Flat Hd Screw, 6-32 x 3/4 in. and 6-32 Hex Nut (For Control Panel) |

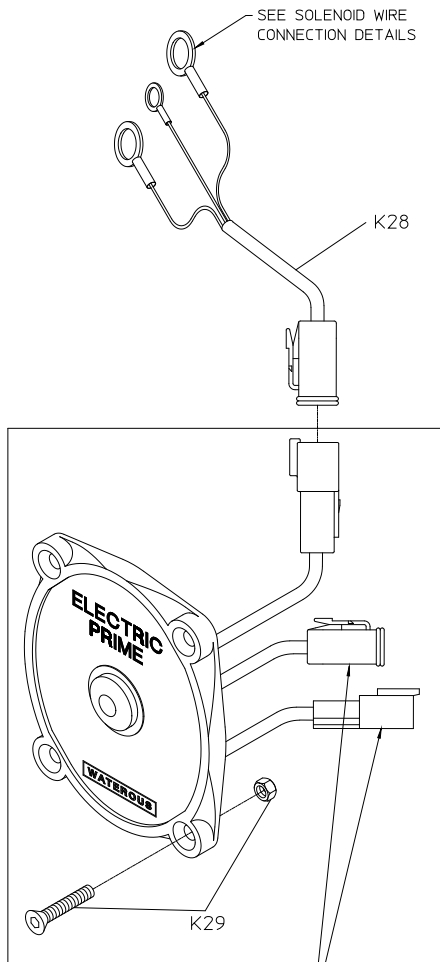


PANEL SWITCH AND WIRING
STANDARD PUSH-BUTTON SWITCH
 SINGLE PRIMER

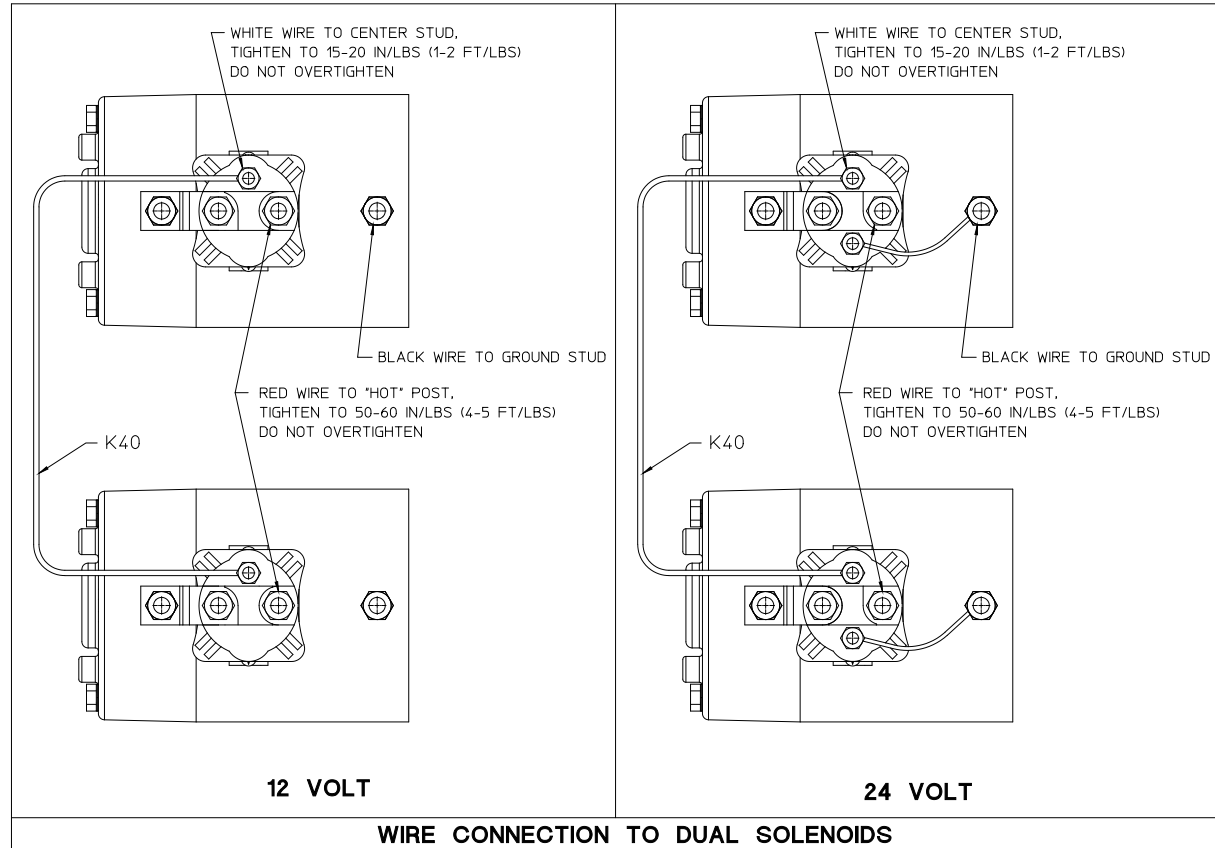
Panel Switch and Wiring
Standard Push-Button Switch – Dual Primers

| REF. NO. | DESCRIPTION |
|----------|--|
| K20 | Control Panel with Integral Switch (Includes K29 Mounting) |
| K28 | Cable Extension |

| REF. NO. | DESCRIPTION |
|----------|--|
| K29 | Flat Hd Screw, 6-32 x 3/4 in. and 6-32 Hex Nut (For Control Panel) |
| K40 | Jumper Wire |



USED IF PUMP HAS MULTIPLE
VAP PRIMING VALVES. SEE
SERVICE PARTS LIST SPL82507

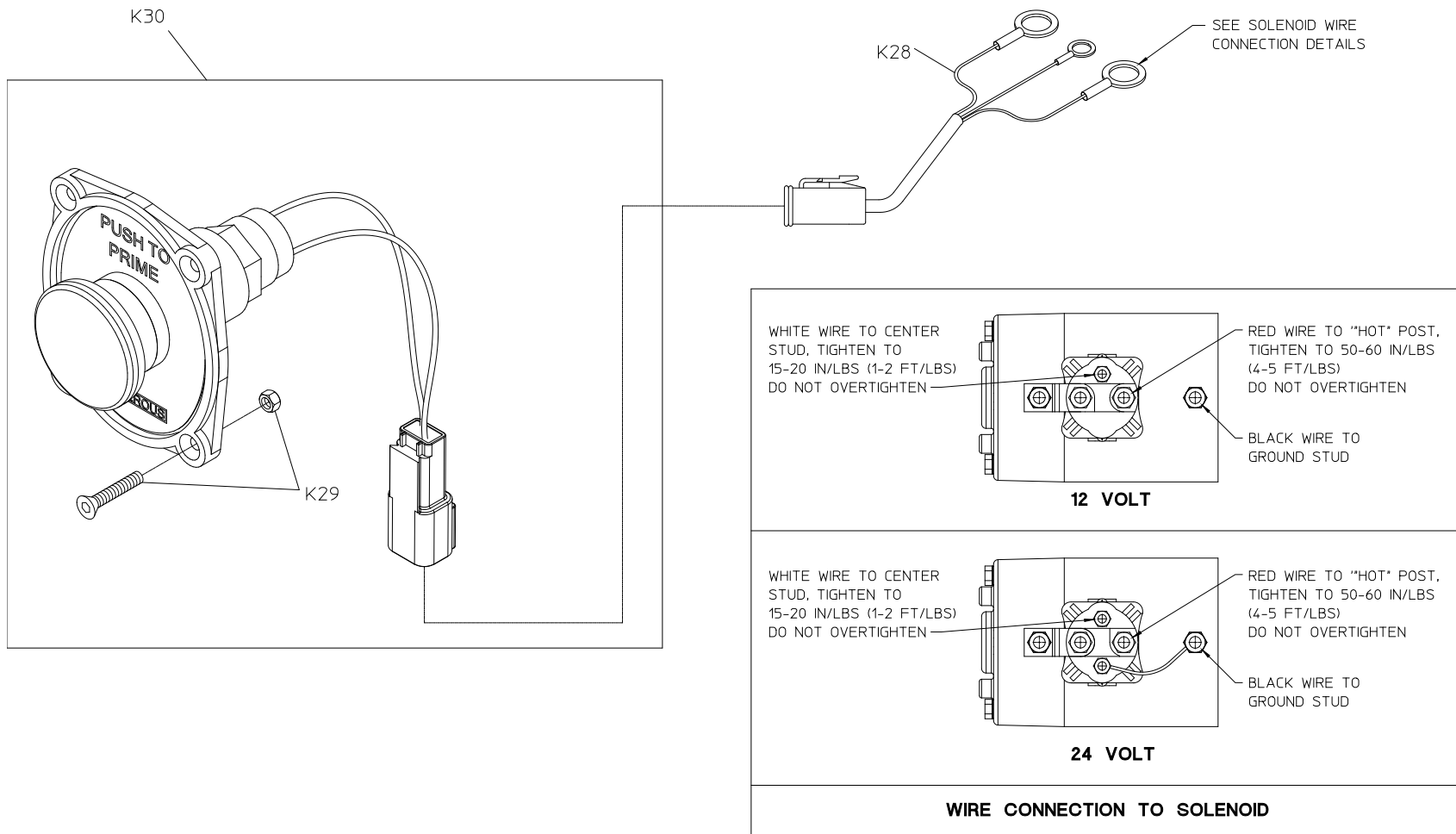


PANEL SWITCH AND WIRING
STANDARD PUSH-BUTTON SWITCH
DUAL PRIMERS

Panel Switch and Wiring
Oversize Push-Button Switch – Single Primer

| REF. NO. | DESCRIPTION |
|-------------|--|
| K28 | Cable Extension |
| K29 | Flat Hd Screw, 6-32 x 3/4 in. and 6-32 Hex Nut (For Control Panel) |

| REF. NO. | DESCRIPTION |
|-------------|--|
| K30 | Control Panel with Integral Switch (Includes K29 Mounting Screws and Nuts) |



PANEL SWITCH AND WIRING
OVERSIZE PUSH-BUTTON SWITCH

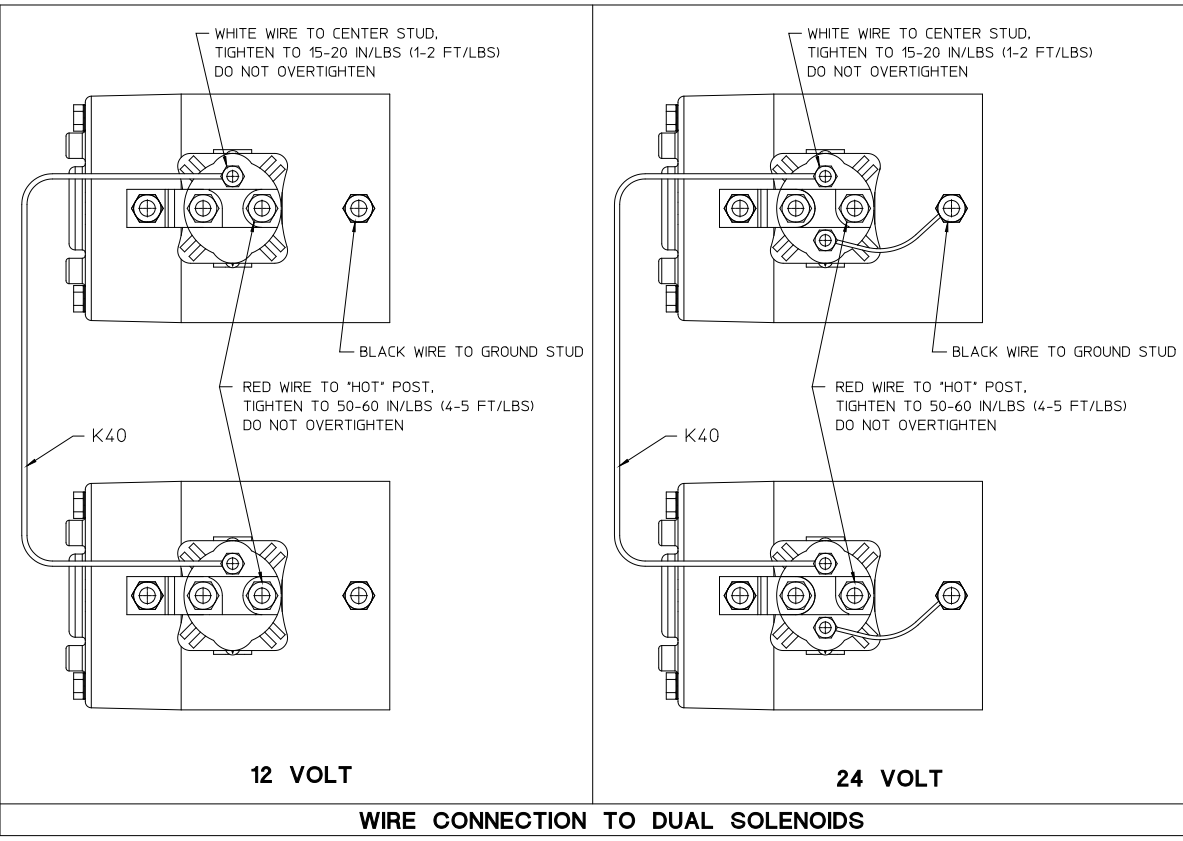
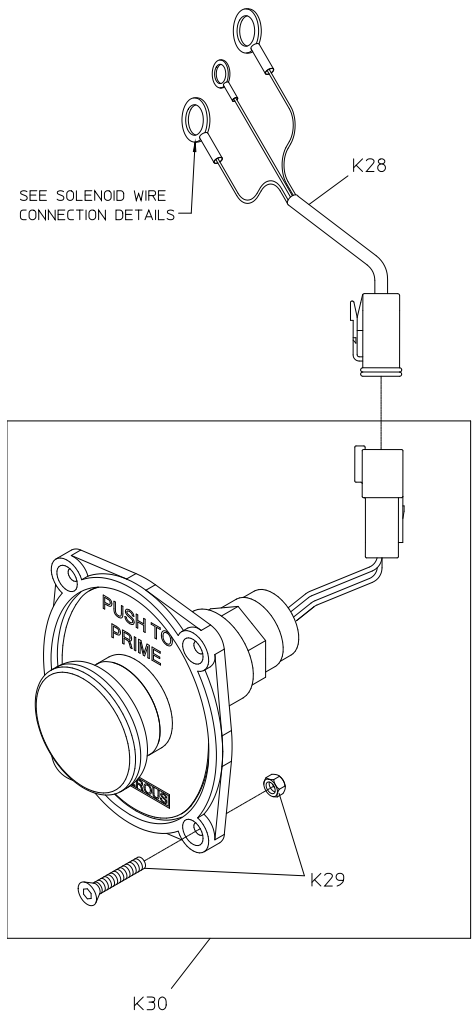
SINGLE PRIMER

Panel Switch and Wiring

Oversize Push Button Switch - Dual Primers

| REF. NO. | DESCRIPTION |
|-------------|---|
| K28 | Cable Extension |
| K29 | Flat Head Screw, 6-32 x 3/4 in. and 6-32 Hex Nut (For Control Panel) |
| K30 | Control Panel with Integral Switch (Includes K29 Mounting Screws and Nuts) |

| REF. NO. | DESCRIPTION |
|-------------|-------------|
| K40 | Jumper Wire |
| | |
| | |

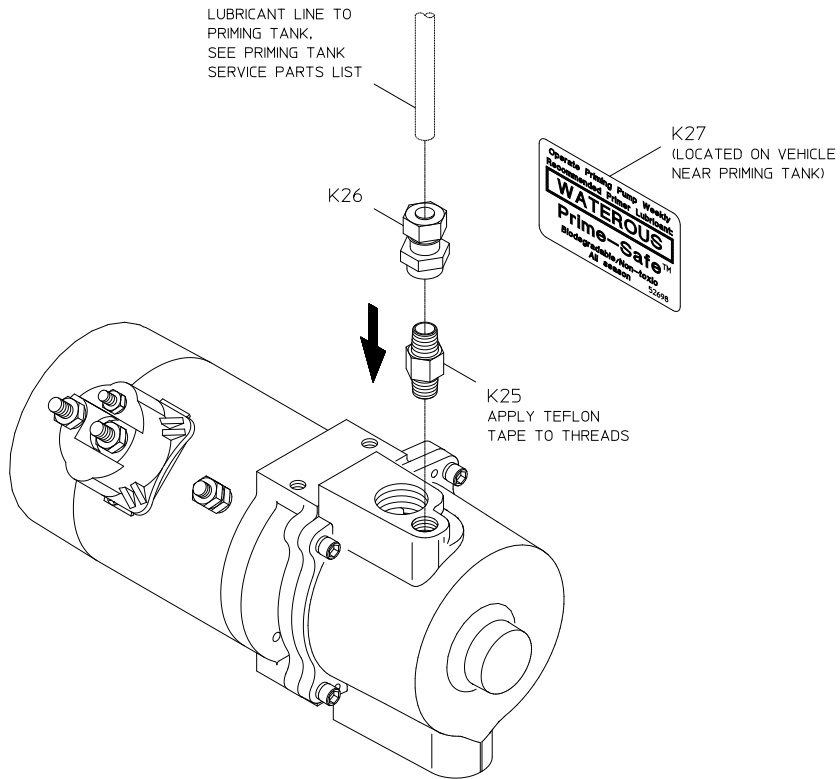


PANEL SWITCH AND WIRING
OVERSIZE PUSH-BUTTON SWITCH
 DUAL PRIMERS

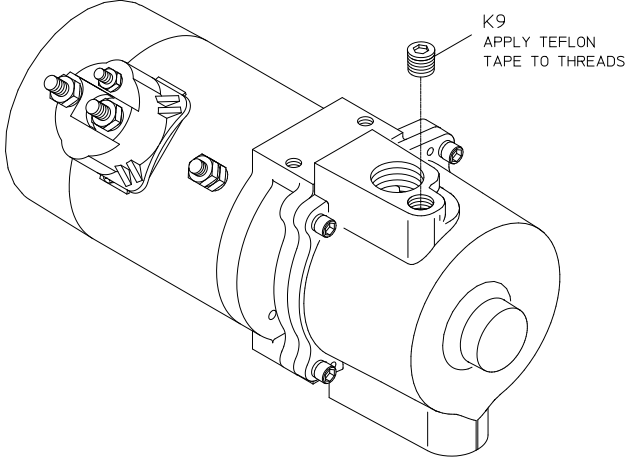
Prime-Safe™ Lubricant

| REF. NO. | DESCRIPTION |
|----------|-----------------------------|
| K9 | Headless Pipe Plug, 1/8 NPT |
| K25 | Check Valve, 1/8 NPT |

| REF. NO. | DESCRIPTION |
|----------|------------------------------|
| K26 | Compression Fitting, 1/8 in. |
| K27 | Prime-Safe™ Decal |



CONFIGURATION WHEN USED



CONFIGURATION WHEN NOT USED

PRIME-SAFE™ LUBRICANT