

|   | Description: | KIT - GEN II OLI<br>MD DTY – FIELD PRGM |
|---|--------------|---|
|   | Part Number: | 85768                                   |
| ĺ | Revision:    | A0                                      |
| ĺ | Date:        | 08 DEC 2010                             |
|   | Division:    | Industrial                              |

### **General Safety Precautions:**



#### MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to severe injury or

To avoid injury to hands or fingers.

- · Always keep hands clear of wire rope, hook loop, hook and fairlead opening during installation, operation and when spooling in or out.
- . Always use extreme caution when handling hook and wire rope during spooling operations.
- · Always use supplied hook strap whenever spooling wire rope in or out, during installation or operation to avoid injury to hands or fingers.



## **FALLING OR CRUSHING HAZARD**

Failure to observe these instructions could lead to severe injury or death.

- Never use as an overhead hoist, or to suspend a load.
- Never use to lift or move persons.



Failure to observe these instructions could lead to severe injury or death.

- Always remove jewelry and wear eye protection.
- Never lean over battery while making connections.
- Always verify area when drilling is clear of fuel lines, fuel tank, brake lines, electrical wires, etc
- . Never route electrical cables:
  - Across any sharp edges.
  - Through or near moving parts.
  - Near parts that become hot.
- · Always insulate and protect all exposed wiring and electrical terminals.
- Always install terminal boots as directed in installation instructions.

# **CAUTION**

#### MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor to moderate injury.

#### **General Safety:**

- Always Know Your Winch: Take time to fully read and understand the included Installation and Operations guide, and Basic Guide to Winching Techniques, in order to understand your winch and the winching operation.
- Never operate this winch if you are under 16 years of age.
- Never operate this winch when under the influence of drugs, alcohol or medication.
- Never exceed winch or wire rope rated capacity. Double line using a snatch block to reduce winch load.

#### **Installation Safety:**

- Always choose a mounting location that is sufficiently strong to withstand the maximum pulling capacity of your winch.
- Always use factory approved switches, remote controls, accessories and installation components.
- Always use grade 5 or better hardware, never weld bolts and never use longer bolts than those supplied from factory.
- Always complete winch mounting and attachment of hook to hook loop before wiring winch during installation.
- Always position fairlead with WARNING label on top.
- Always spool the wire rope onto the drum as indicated by the drum rotation label on the winch. Required for automatic brake to work (if winch is so equipped) and for correct installation orientation.
- Always prestretch wire rope and respool under load before use. Tightly wound wire rope reduces chances of "binding", which is wire rope working it's way down into a loosely wound wire rope layer, and catching or damaging itself.



**CUT AND BURN HAZARD** 

Failure to observe these instructions could lead to minor to moderate injury.

To avoid injury to hands and fingers:

- Always wear heavy leather gloves when handling a wire rope.
- Never let wire rope slip through your hands.
- Always be aware of possible hot surface at winch motor, drum or wire rope during or after winch use.



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## A

### **CAUTION**

#### **MOVING PARTS ENTANGLEMENT HAZARD**

Failure to observe these instructions could lead to minor to moderate injury.

#### **Winching Safety:**

- Always inspect winch installation and wire rope Condition before operating winch. Frayed, kinked or damaged wire rope must be replaced immediately. Loose or damaged winch installation must be corrected immediately.
- **Never** leave remote control plugged into winch while free spooling, rigging, or sitting idle.
- **Never** hook wire rope back onto itself. This damages the wire rope. Always use a choker chain, wire choker rope or tree trunk protector on the anchor.
- **Always** prior to winching, remove any element that may interfere with safe winch operation.
- Always take your time when rigging for a winch pull.
- Always be certain the anchor you select will withstand the load, and the strap or chain will not slip.
- **Never** engage or disengage clutch if winch is under load, wire rope is in tension or wire rope drum is moving
- **Always** unspool as much wire rope as possible when rigging. Double line or pick distant anchor point.
- **Never** winch with less than 5 wraps of wire rope around the drum, the wire rope could come loose from the drum.
- Always stand clear of wire rope and load during operation.
- Never touch wire rope or hook while in tension or under load.
- **Never** touch wire rope or hook while someone else is at the control switch or during winching operation.
- Never touch wire rope or hook while remote control is plugged into winch.
- Always stand clear of wire rope and load and keep others away while winching.

Always require operator and bystanders to be aware of stability during winching of vehicle and/or load.

- Always keep remote control lead clear of the drum, wire rope and rigging. Inspect for cracks, pinches, frayed wires or loose connections.
  Replace if damaged.
- Always pass remote control through a window to avoid pinching lead in door, when using remote inside a vehicle.

## **NOTICE**

#### **AVOID WINCH AND EQUIPMENT DAMAGE**

- Always avoid continuous side pulls, which can pile up wire rope at one end of the drum. This can damage your wire rope or winch.
- Always ensure the clutch is fully engaged or Disengaged.
- **Never** use winch to tow other vehicles. Shock loads can momentarily exceed capacity of wire rope & winch
- **Always** use care to not damage your frame when anchoring your vehicle during a winching operation.
- **Never** "jog" wire rope under load. Shock loads can momentarily exceed capacity of wire rope and winch.
- Never use winch to secure a load during transport.
- Never submerge winch in water.
- Always store the remote control in a protected, clean, dry area.

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#### I. Pre-Install Checklist

- 1. Inspect the wire rope for signs of physical damage including fraying, crushing, sharp bends, kinks, or broken stands. If signs of damage are found, the wire rope should be replaced. Contact WARN Customer Service for wire rope application information.
- 2. Check to see that you have received the following items:

| ITEM   | DESCRIPTION                                | QTY |
|--------|--|-----|
| 81600  | MODULE ASSY-MED DUTY-GEN II OLI            | 1   |
| 83194  | BRKT CONTCTR MD DTY GII OLI                | 1   |
| 62819  | SCR HEX FLNG 10-24 X 3/4                   | 4   |
| 83196  | COVER ASSY CTRL PK MED DTY GII OLI         | 1   |
| 80765  | HARNESS ASSY-GEN II OLI NON-POTTED, 430 MM | 1   |
|        | INSTALL INST - GEN II OLI - MD DTY (THIS   |     |
| 987468 | INSTRUCTION)                               | 1   |
| 985644 | CE DoC                                     | 1   |
| 86227  | LABEL, CE MARK                             | 1   |
| 8763   | SCR HEX FLNG 10-24 X 3/8                   | 2   |
| 86212  | RTV SILICONE- LOCTITE 598-BLACK 0.5 OZ     | 1   |
| 76406  | CONNECTOR - BUTT - 18-22 AWG - RED         | 2   |

- 3. Tools checklist:
  - Philips Screwdriver
  - Standard Socket Set
  - 13 mm Wrench
  - Needle-nose Pliers
  - Wire Cutter
  - Wire Stripper
  - Crimper Tool
- 4. Upon removing the Gen II OLI from the packaging, check for damage including broken or cracked plastic housing, broken or missing wires, broken connector. Do not install if any of these conditions are found.
- 5. Make sure the environment surrounding the winch or area of the GEN II OLI mounting are free of:
  - Combustible vapors
  - Chemical fumes
  - Oil vapors
  - Corrosive material



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- 6. Make sure the air temperature surrounding the Gen II OLI stays within 120F (49C) and -40
- 7. The verification steps in Section III MUST be completed for all winches.
- 8. Verify the winch model and operating voltage. This information will be needed when programming the module for the desired setpoint

#### II. **Installation Procedure:**

- Step 1: Unscrew and remove the control pack cover. (Figure 1)
- Step 2: Disconnect the positive cable and white wire from the positive contactor terminal. (Figure 2)







Figure 2

- Step 3: Disconnect the green, brown, and black wires from contactor terminal 1, 2, and 3. (Figure 3)
- Step 4: Cut the TPD white wire from the control pack green wire. (Figure 4)

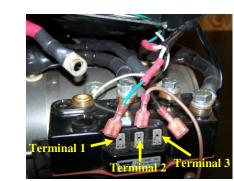


Figure 3

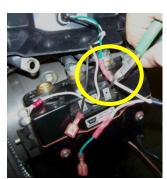


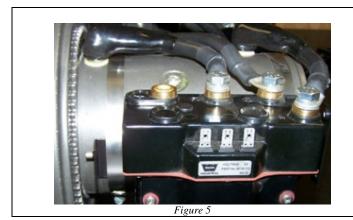
Figure 4

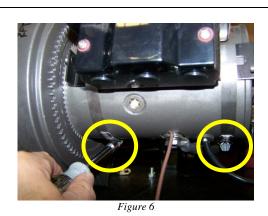


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Step 5: Remove entirely the control pack cover assembly. (Figures 5)

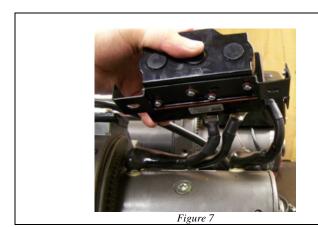
Step 6: Unscrew the contactor mounting clamps. (Figure 6)

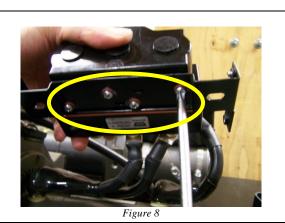




Step 7: Gently lift up the contactor from the motor housing. (Figure 7)

Step 8: Unscrew and remove the contactor bracket. (Figure 8)







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Step 9: Apply moderately silicon sealant PN 34018 onto the four contactor fasteners for reuse with the new bracket (Figures 9 & 10)

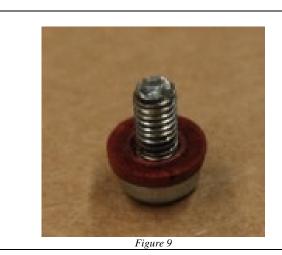




Figure 10

Step 10: Locate the new bracket PN 83194. (Figure 11)

Step 11: Install the bracket onto the contactor and tighten the four screws (Figure 12)

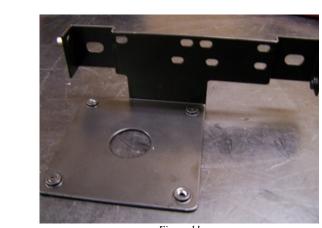




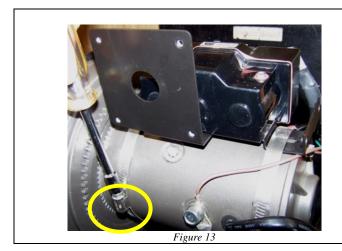


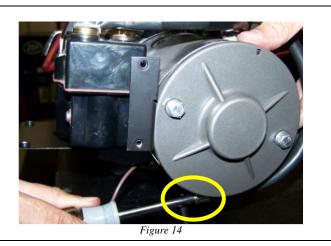
Figure 12



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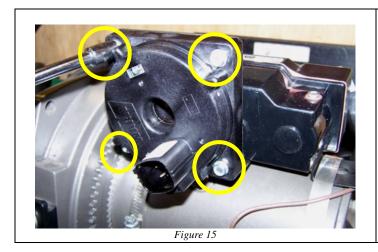
Step 12: Reinstall the contactor with bracket on the motor using the two existing mounting clamps. (Figures 13 & 14)

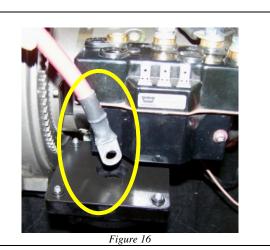




Step 13: Install the Medium Duty GEN-II OLI module PN 81600 onto the mounted bracket using the four screws PN 62819 (Figure 15)

Step 14: Insert the positive cable through the center of the OLI module ensuring the cable end connects to the battery. Note: This orientation is very important. (Figure 16)





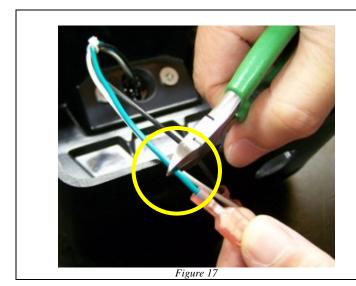


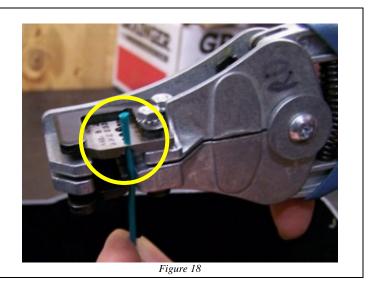
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NOTES: For the winch without Motor Thermal Protection –TPD, skip steps 15, 16, 17, and 20. Connect the blue wire from the OLI harness directly to the green wire from the control-pack.

Step 15: Locate the provided control pack cover assembly PN 83196. Cut the terminal connector from the green wire. (Figure 17)

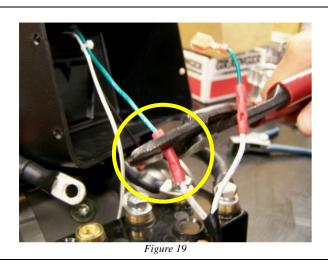
Step 16: Strip off the green wire insulation at about 8 mm (Figure 18)



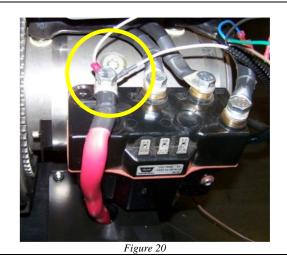


Step 17: Splice together the green wire from the control pack with the white wire from the motor TPD using the provided butt connector PN 76406. (Figure 19)

Step 18: Connect the positive cable, the white wire from the control pack, and the white wire from the OLI harness PN 80765 to the contactor positive terminal. (Figure 20)



**WARN** 



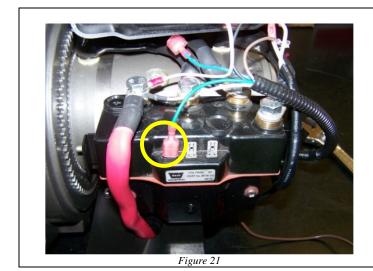
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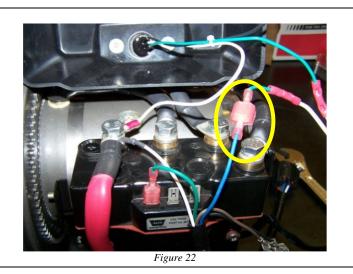


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Step 19: Connect the green wire from the OLI harness to the contactor terminal 1. (Figure 21)

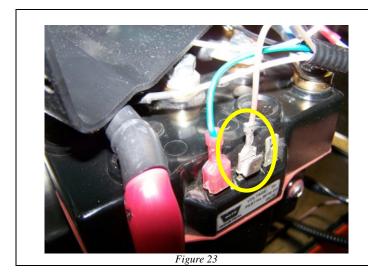
Step 20: Connect the blue wire from the OLI harness to the TPD white wire. (Figure 22)

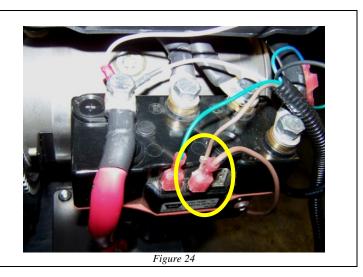




Step 21: Connect the brown wire from the OLI harness to the contactor terminal 2. (Figure 23)

Step 22: Connect the brown wire from motor ground to the contactor terminal 2. (Figure 24)



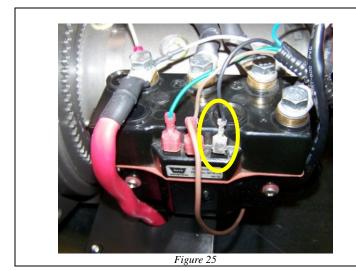


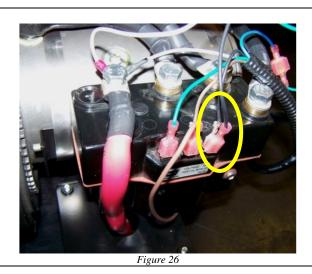


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Step 23: Connect the black wire from the OLI harness to the contactor terminal 3. (Figure 25)

Step 24: Connect the black wire from the control-pack cover to the contactor terminal 3. (Figure 26)



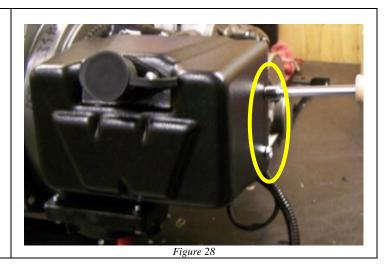


Step 25: This completes the wiring interconnections. Check for the correct connections. (Figure 27)

Step 26: Install and control-pack cover using the two provided screws PN 8763. (Figure 28)



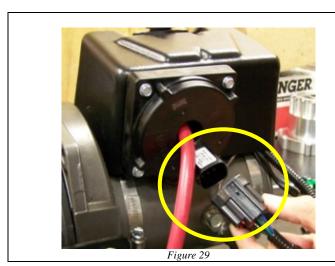


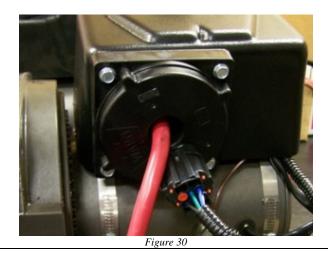




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Step 27: Connect the OLI harness plug onto the OLI module 6-pin connector. This completes the installation of the Medium Duty GEN –II OLI module onto a WARN SRS 12 / SRS 18 winch (Figures 29 & 30)





#### III. Installation Verification

These steps must be completed to verify that the OLI installation is correct. In addition, the correct rope winding direction must be verified for the winch brake and OLI to function correctly. Failure to verify the correct rope winding direction will result in failure of the OLI and/ or winch brake, resulting in equipment damage, severe personal injury, or death.

- Step 1: Install the winch remote control. Verify that all personnel are clear of the winch and winch rope. Briefly operate the POWER OUT button on the remote control. The wire rope must pay out during this operation.
- Step 2: Briefly operate the POWER IN button on the remote control. The wire rope must pay in during this operation.

**WARNING:** If the wire rope moves in the wrong direction during EITHER step 1 or step 2, the winch rope has been wound incorrectly and must be rewound.

- Step 3: Remove the OLI Harness Connector from the OLI module. Briefly operate the POWER IN button on the remote control. The winch should not operate during this step.
- Step 4: Reconnect the OLI Harness Connector to the OLI module. There should be a brief flash of the BOTH the red and yellow LEDs on the OLI module when the connector is installed. If no flash is observed, the OLI module should be replaced.

The Winch and OLI module are now ready for operation.

**NOTES:** The OLI module is shipped pre-programmed at requested setpoint for a given winch product. If a different setpoint is required, the module may be reprogrammed in the field by WARN trained factory representatives.