Installation & Operator’s Manual

MAVERICK12
12000 LBS

Model Number: 76-6012
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Warnings</td>
<td>2</td>
</tr>
<tr>
<td>Precautions</td>
<td>3</td>
</tr>
<tr>
<td>Getting Started</td>
<td>4</td>
</tr>
<tr>
<td>Clocking Instructions</td>
<td>5</td>
</tr>
<tr>
<td>Control Box Installation</td>
<td>6</td>
</tr>
<tr>
<td>Wiring Instructions</td>
<td>8</td>
</tr>
<tr>
<td>Winch Operation</td>
<td>9</td>
</tr>
<tr>
<td>Winching Tips &amp; Techniques</td>
<td>10</td>
</tr>
<tr>
<td>Winch Maintenance</td>
<td>13</td>
</tr>
<tr>
<td>Troubleshooting</td>
<td>13</td>
</tr>
<tr>
<td>Parts Breakdown &amp; Assembly</td>
<td>14</td>
</tr>
<tr>
<td>Warranty</td>
<td>15</td>
</tr>
</tbody>
</table>
SAFETY WARNINGS

1. LEARN TO USE YOUR MILE MARKER WINCH: After winch has been installed, take some time and practice using it so you will be familiar with ALL OPERATIONS. Periodically check the winch installation to ensure that all bolts are tight. To ensure proper operation, carefully inspect for any damaged parts before operating the winch.

2. KEEP WINCHING AREA CLEAR: Do not allow people to remain in the area during winching operations. Do not step over a taut steel cable or allow anyone else to do so. Due to the possibility of steel cable failure stand clear of any possible pathway. A snapped steel cable could cause winch failure, injury or death. Keep proper footing and balance at all times. Do not reach over or across the winch and/or pulling steel cable while the winch is in operation.

3. INSPECT STEEL CABLE AND EQUIPMENT FREQUENTLY: The steel cable should be inspected for damage that could reduce it's breaking strength. A frayed steel cable with broken strands should be replaced immediately. Always replace the steel cable with a steel cable that is rated to sustain the load that the winch is capable of pulling. Any substitute must be IDENTICAL in strength, quality, lay and stranding to the Mile Marker steel cable originally supplied.

4. WORKING AREA CONDITIONS: Keep the working area well lit. Do not use this winch in the presence of flammable gases or liquids. KEEP CHILDREN AWAY: Keep children away from working area. Never let children operate the winch.

5. DRESS PROPERLY: Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non skid footwear is the only type of clothing you should be using when operating the winch. Wear restrictive hair covering to contain long hair.

6. USE HEAVY GLOVES: When handling or rewinding steel cable always use hand protection to eliminate the possibility of cuts caused by burrs & slivers from broken strands.

7. DRUM: Always make sure that there are at least 5 complete turns of steel cable left on the drum before winching.

8. KEEP HANDS AND FINGERS CLEAR OF STEEL CABLE AND HOOK WHEN OPERATING WINCH: Do not put your finger through the hook when reeling in the last few feet. If your finger should become trapped in the hook, you could lose your finger. Do not guide a steel cable under tension onto the drum with your hand.

9. DO NOT HOOK THE STEEL CABLE BACK ONTO ITSELF: Hooking the steel cable back onto itself creates an excessive strain that could break individual strands; this, weakens the entire steel cable.

10. KEEP PULLING DURATIONS AS SHORT AS POSSIBLE: The winch is designed for intermittent use and cannot be used in constant duty applications. Do not pull more than one minute at or near rated load. If the motor becomes too hot to touch, stop and let it cool off for a few minutes. If the motor stalls, cut off the power immediately.

11. DO NOT OVERLOAD: For your safety and efficient performance, always use this winch at or under its rated capacity for your safety and for better performance. Do not use inappropriate attachments in an attempt to exceed its rated capacity.

12. AVOID CONTINUOUS PULLS FROM EXTREME ANGLES: This will cause the steel cable to pile up at one end of the drum. The steel cable should be as straight as possible to the direction of the object.

13. DISCONNECT SWITCH: Unplug switch when not in use.

14. REPLACEMENT PARTS & ACCESSORIES: When servicing, use only identical replacement parts. Usage of any other parts will void the warranty. Approved accessories are available from your local distributor.

15. DO NOT force clutch. Rotate drum to align gears for freespool.
1. Keeps hands and body away from roller fairlead (steel cable intake slot) when operating.
2. Secure vehicle in position before using winch.
3. Do not exceed winch load weight capacity.
4. Be certain winch is properly bolted to a structure (or vehicle) that can hold the winch load.
5. Always use proper couplings when connecting winch steel cable hook to load.
6. Do not lift items vertically. The winch was designed for horizontal use only.
7. Do not overload the winch. It will do the job better at the load it was intended.
8. Do not use inappropriate attachments to extend the length of the steel cable.
9. Do not lift people or hoist loads over people.
10. Do not come in between the winch and the load when operating.
11. Do not apply load to winch when steel cable is fully extended. Keep at least 5 full turns of steel cable on the drum.
12. After moving an item with the winch, secure the item. Do not rely on the winch to hold it for an extended period.
13. Examine winch before using. Components may be affected by exposure to everyday weathering, chemicals, salts, and rust.
14. Do not fully extend steel cable while under load. Keep 5 COMPLETE TURNS of steel cable around the winch drum.
15. When loading a boat into a trailer without reel or side hull rollers, make sure the trailer is submerged in the water when the boat is loaded by the winch. Attempting to drag the boat on to the trailer while on land can cause winch failure and possible injury.
16. Do not operate winch if steel cable shows any signs of weakening, is knotted or kinked.
17. Winch does not have a locking mechanism. Secure load after moving.
18. Do not cross over or under the steel cable while it is in process of loading.
19. Do not move vehicle with steel cable extended and attached to load to pull it. The steel cable could snap.
20. Apply blocks (such as a wheel choke) to vehicle when parked on an incline.
21. Respool steel cable properly.
Winch Mounting

**NOTE:** Mile Marker recommends the use of its Mile Marker mounting systems for proper winch installation and optimum winch performance. However, if not using a Mile Marker mounting system, make sure the mounting platform being used is strong enough to meet the maximum rated load of the winch. Mile Marker recommends steel plates with a thickness of at least 0.25”.

Your winch should be aligned and secured to a solid part of the vehicle (front or rear) where the full rated load will be evenly distributed.

**CAUTION:** It is essential that the mounting surface be flat and that the winch is mounted so the three major sections (gear housing end, drum, and motor end) are in proper alignment.

1. If necessary, drill four mounting holes (10mm in dia.), in a 10” x 4.5” pattern
2. Fasten the winch body to the mounting platform using the four screws, washers and spring washers (items 46, 47 & 48 on page 14) provided
3. Torque the capscrews to about 35 ft-lb (47.5 N-m)
4. All Mile Marker mounting systems come pre-drilled with fairlead holes. If you are using any other mounting platform, drill two holes for the roller fairlead installation. Position the holes so the fairlead opening hole stretches from the circumference of the drum to the end of the maximum permissible layers on the drum in the direction cable is being rolled.

**CAUTION:** When replacing the cap screws or when longer bolts are required, make sure you use bolts Grade 5 or greater
CLOCKING INSTRUCTIONS

Winch gear housing can be clocked in 8 positions enabling the user to position the clutch lever at 8 equidistant locations (0°, 45°, 90°….360°). (Fig. 1-1)

1. Remove gear housing from tie bars (Fig. 1-2)
2. Remove the 8 bolts in the gear housing leg (Fig. 1-3)
3. Separate leg and gear housing. A slight tap with a hammer might be needed (Fig. 1-4)
4. Place gear housing leg in the angle desired and screw in bolts (Fig. 1-5) Torque to spec
   - M4 X 12: 2 ft-lb (Item #25 from page 14, Parts Breakdown & Assembly)
   - M8 X 25: 18 ft-lb (Item #2 from page 14, Parts Breakdown & Assembly)
5. Properly slide drive shaft in the gear housing and line drum into drive gear (Fig. 1-6)
6. Re-attach tie bars to gear housing leg by using the same process as step 1, in reverse order (Fig. 1-2)
CONTROL BOX INSTALLATION

NOTE: Your Mile Marker control box can either be mounted to the winch or in a remote location within your vehicle. If you choose to mount it in a remote location, please ensure that: the location does not interfere with any moving/functioning parts on the vehicle, and you use electrical cables with specifications similar to those provided by Mile Marker. For best results, Mile Marker recommends you mount the control box to the winch following the instructions below.

Tools Required for Control Box Installation
You will need a 14mm wrench and a 10mm Allen wrench. You will also need general hand tools for mounting the winch. Your control box can be mounted over the winch motor, or over the tie bars, based on mounting constraints, and personal preference. Fig. 2-1 shows the control box and mounting hardware included in your new winch box.

Mounting Control Box on Motor
If you choose to mount your control box on the winch motor, please follow the following steps:
1. Mount the control box to the mounting bracket using two screws and a Phillips head screw driver (Fig. 2-2)
2. With mounting bracket attached to the control box, locate the mounting points on the side of the motor die casting (Fig. 2-3)
3. Align the mounting bracket to the mounting points in the motor die casting. Screw the bolts into mounting points (Fig. 2-4)
Mounting Control Box on Tie Bars

1. Secure cable to the back tie bar (Fig. 2-5)
2. Remove the front tie bar (Fig. 2-6)
3. Attach the removed front tie bar to the front of the control box using two screws and a Phillips head screw driver (Fig. 2-7)
4. Attach the two mounting brackets to the backside of the control box using two screws and a Phillips head screw driver (Fig. 2-8)
5. Hook the control box to the back tie bar (Fig. 2-9)
6. Align the front tie front tie bar bolt holes with winch bolt holes. Screw in bolts to secure the tie bar (Fig. 2-10)
7. Pull steel cable back underneath the bottom of the drum through to the front side of the winch (Fig. 2-11)
WIRING INSTRUCTIONS

Wiring the Control Box

1. Slip the boots onto pertinent cables and make electrical connection in accordance with Fig. 2-12. Slide the boots onto all the electrical connections made (Fig. 2-12 and Fig. 2-13).

2. Run battery power cables carefully under hood of vehicle, avoiding interference with moving parts and abrasion points which could potentially cause electrical short.

3. Attach BLACK cable to NEGATIVE battery terminal (-), followed by RED cable to POSITIVE battery terminal (+) (Fig. 2-14). Refer to Winch Operation on page 9 of this manual for proper functioning - if drum rotates in the incorrect direction when “IN” button is pressed, green and yellow motor cables need to be switched.

**CAUTION:** Make sure that all exposed electrical connections are covered with insulation boots to avoid electrical short. Battery cables should not be drawn taut; leave some slack for cable movement. Also, ensure that they are routed properly without any interference from vehicular components that could potentially damage the steel cable or cause electrical short. Long battery cable runs may have significant voltage drops that may cause the winch motor controller to not operate.

**DO NOT CONNECT POWER CABLES TO BATTERY UNTIL FINAL STEP OF INSTALLATION**
Operational Instructions

1. Disengage the clutch by moving the clutch lever to disengage position (or freespool mode) (Fig. 3-1)
2. Freespool the cable and connect to the desired anchor point, whether for self recovery, or that of another vehicle being recovered
3. Fully engage the clutch by moving the clutch lever to engage position (Fig. 3-1)
4. Lift the protective boot covering the hand control plug-in. Insert the hand control plug.
6. Start winching IN (Fig. 3-2) to remove the slack on the cable, ensuring that the cable is winding onto the drum properly (without any overlapping or gaps). NEVER disengage the clutch while the cable is under load
7. When finished winching, let off the load by winching OUT (Fig. 3-2). With adequate slack created, unhook the steel cable and re-wind the cable onto the drum.

NOTE: For optimal winch performance, it is recommended that you use a fully charged 12V battery with at least 650 cold cranking amperes. It is also advisable to keep the engine running during the winch operation so the battery is continuously charging. All Mile Marker winches are equipped with a clutch lever that engages / disengages the clutch and the clutch, when engaged, will couple the gear train with the winch drum (i.e. locking the winch). When disengaged, the clutch de-couples the gear train from the winch drum enabling the drum to rotate independently (i.e. free spooling the winch).

CAUTION: Before using your new Mile Marker electric winch, rewind the entire steel cable on the drum under a load of at least 500 lbs (227 kg) starting with at least 5 wraps on the initial layer. Failure to do so will result in the outer wraps pressing against the inner wraps, damaging the cable. Always have at least 5 wraps of cable on the winch drum BEFORE winching and make sure the clutch is fully engaged or fully disengaged to avoid any injuries or damages. Electric winches are for intermittent use only. Never run the winch for more than 1 minute at maximum rated load and wait until the motor cools down before resuming winch operations. To reduce the load on a winch motor, the use of a snatch block is recommended (see pages 10 and 11, Winching Tips & Techniques for snatch block usage). This winch model also features an automatic load holding brake, so never run the winch against the brake ("OUT" on the hand control) for more than 10 seconds. Failure to do so might result in damage to the brake and motor. Always stay clear of the loaded winch cable.
Winching Tips and Use of a Snatch Block

- Use tow hooks, recovery eyes or a clevis mount for attachment of a tow strap or winch steel cable.

Warning: Do not use a ball and/or ball mount as an anchor point for tow strap or winch steel cable. Severe personal injury or death could occur.

- Always heed all winch manufacturer’s recommendations, cautions, and warnings.

- Attach return steel cable to tow hook or recovery eye when using a snatch block. Always use a clevis to secure snatch block to strap, or severe damage could occur to persons and vehicle.

CAUTION: Do not attach return steel cable to winch mount. This may overload winch mount and/or front receiver.

Safety Tips

- DO NOT DISENGAGE CLUTCH LEVER WHEN THERE IS A LOAD ON THE WINCH. Mile Marker electric winches utilize an automatic load holding brake, therefore no adjustment to clutch is needed to maintain load.

- Store the remote control cord in a safe place when not in use to prevent use by children or other unauthorized persons who could injure themselves or others or damage the controls.

- Do not operate winch under the influence of drugs, alcohol, or medication.

- Isolate winch before putting hands in or around the roller fairlead or steel cable drum.

- DO NOT OVERLOAD YOUR WINCH. Do not maintain power to the winch if the drum stops. Overloads can damage the vehicle, winch or winch steel cable and create unstable operating conditions.

- It is recommended to lay a dampener over the steel cable about halfway along to the hook attachment. If a steel cable failure should occur, the weight of the dampener will help prevent the broken steel cable from whipping. Remember to move the dampener as winching proceeds, but halt winching when doing so. Partially raising the hood of the vehicle will also give a measure of protection to its occupants from broken steel cable, consistent with sufficient forward visibility for the operator.

Rating

For maximum line pull rating, winch cable direction must not exceed:
1. 15° angle up or down from horizontal (see image to right)
2. 45° angle left or right from straight ahead (see image to right)

Caution: Exceeding the maximum line pull rating may overload winch, winch mount, and/or front mounted receiver.
Self Recovery

1. Always attempt to get the steel cable as straight as possible to the direction of the vehicle. It is acceptable to start a pull at an angle if it is obvious that the vehicle will turn towards the hook anchoring point. Turning the steering wheel will assist the process. It is recommended that the driver is in the vehicle.
2. Make sure hand brake and foot brake are free and that the transmission is in neutral.
3. When the driver’s attempt to regain vehicle traction is successful, he or she should be careful not to overrun the cable and risk the possibility of it being trapped under the vehicle.
4. DO NOT move your vehicle in reverse to assist the winch. The combination of the winch and vehicle pulling together could overload the cable and winch itself.
5. DO NOT connect steel cable or hook back to winch mount.

Use of a Pulley Block or Snatch Block

Vehicle self recovery using the pulley block attached to the anchor point for direct pull. In this instance the vehicle becomes the “load” and the actual pulling power on the vehicle will be double at half winch steel cable speed. Do not connect steel cable or hook back to winch mount.

Direct pull on load using the winch vehicles as the anchor with pulley block attached to the load. The most important aid to successful winching is the pulley block, which can be used to increase the pulling power of the winch of for indirect pulls. Pulley blocks can be used in two modes. First mode is attached to the load and second is secured to an anchor point.

Indirect pull necessitated by obstructions or soft ground. Attach pulley block to load using a suitable anchor point.
NOTE: The angled direction taken by the load and subsequent angle of steel cable feed back on the winch drum (extreme example shown). There may be unavoidable circumstances requiring this mode, though in general it is not recommended unless applied in stages by moving the anchor point or vehicle to avoid the sharp angled rewind on the winch drum. The actual load pulling power and steel cable speed will depreciate with any increased angle between the steel cables. The anchor point, when used must be secure, using a tree, another vehicle or any firm structure to which a pulley block can be used to your advantage.

Use of a Nylon Sling and Shackle

A shackle should always be used when attaching winch hooks to nylon slings. NOTE: The shackle must pass through both eyes of the sling. The safe working load of the nylon sling is based on the use of both eye ends. Do not use the cable or hook to connect directly to the nylon sling.
Use of Gloves
When handling or rewinding the steel cable always use gloves to reduce the possibility of cuts that can be caused by burrs or broken strands. Inspect cable and equipment frequently. The cable should be replaced immediately if there are any evident signs of fraying, burrs, or broken strands. Replace the cable with a Mile Marker recommended replacement part and make sure the cable is rated to sustain any load the winch is capable of pulling. Substitutes must be IDENTICAL in strength, quality, lay and stranding to the Mile Marker steel cable originally provided. Never hook the cable back onto itself. Hooking the cable back onto itself creates an unacceptable strain, breaking individual strands, which in turn weakens the entire cable. Use a sling and avoid continuous pulls from extreme angles as this causes cable to pile up at one end of the drum.

NOTE: For optimal winch performance, it is recommended that you use a fully charged 12V battery with at least 150 Cold Cranking Amperes. Further, it is advised to keep the engine running during the winch operation, so that the battery is being charged continuously.

Motor Temperature
ELECTRIC WINCHES ARE DESIGNED FOR INTERMITTENT USE ONLY. Do not run this winch at a high load for an extended period of time. To check the motor temperature: stop operation, secure the load, release the tension on the steel cable, and place your hand on the motor to check temperature. If you feel the motor is warm to the touch, let it cool off for a few minutes. If the motor is laboring, stop sooner and more often to check the motor temperature. Using a double line with a snatch block will reduce the load on the winch to about half. The lower the amp load on the winch the longer it will take to heat up the motor.

Spooling Under Load
Spooling Under Load: Always ensure that steel cable passes between drum & mounting surface. Always wind the steel cable as evenly and tight as possible. Avoid shock loading the winch when spooling in. If this is done you can cause a hazardous condition that can break the steel cable or damage the winch. Avoid pulling at an angle for an extended period. This will stack the steel cable up on side of the spool and cause serious damage to the winch. You may have to reposition the cable a few times to allow the winch to pull in a straight line.

Rigging
Spool out as much cable as possible to the farthest object available. Keep the cable in as straight a line as you can. Spool the line back on the winch as evenly as possible when retrieving the cable. Natural anchors like trees, stumps and rocks are the better choices. Always use a tree saver wherever possible. Only connect the steel cable to an object that will be able to resist the pulling power of the winch being used.

WINCH MAINTENANCE

• All moving parts within the electric winch have been lubricated using high temperature lithium grease at the factory. No further internal lubrication is required for the life of the winch.
• If using steel cable, lubricate the steel cable periodically using light penetrating oil.
• Electrical connections may corrode over a period of time due to environmental changes. This may result in reduced performance of the winch or even possible electrical shorting. Hence, always clean the electrical connections before and after using the winch.
• After every use of the winch, inspect the steel cable for damages such as kinks, broken strands etc. When damaged, replace the cable immediately.
# TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Suggested Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor does not turn on</td>
<td>Safety switch is OFF</td>
<td>Turn safety switch ON</td>
</tr>
<tr>
<td></td>
<td>Switch assembly not connected properly</td>
<td>Insert switch assembly firmly to the connector</td>
</tr>
<tr>
<td></td>
<td>Loose battery cable</td>
<td>Tighten nuts on cable connectors</td>
</tr>
<tr>
<td></td>
<td>- Connection</td>
<td>Tap solenoid to free contact, applying 12 volts to coil terminal directly. An audible clicking will occur when activating.</td>
</tr>
<tr>
<td></td>
<td>- Solenoid malfunctioning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Defective switch assembly</td>
<td>Replace switch assembly</td>
</tr>
<tr>
<td></td>
<td>Defective motor</td>
<td>Check for voltage at armature port with switch pressed. If voltage is present, replace motor.</td>
</tr>
<tr>
<td></td>
<td>Water has entered motor</td>
<td>Drain and dry. Run in short bursts without load until completely dry.</td>
</tr>
<tr>
<td>Motor runs too hot</td>
<td>Long period of operation</td>
<td>Let winch cool down periodically</td>
</tr>
<tr>
<td>Motor runs slowly or without normal power</td>
<td>Battery runs down</td>
<td>Recharge battery by running vehicle engine</td>
</tr>
<tr>
<td></td>
<td>Insufficient current or voltage</td>
<td>Clean, tighten or replace the connector</td>
</tr>
<tr>
<td>Motor runs but cable drum does not turn</td>
<td>Clutch not engaged</td>
<td>Turn clutch gear to IN/ENGAGED position - if that does not work, ask a qualified technician to check and repair</td>
</tr>
<tr>
<td>Motor runs in one direction only</td>
<td>Defective or stuck solenoid</td>
<td>Tap solenoid to free contacts. Repair or replace solenoid.</td>
</tr>
<tr>
<td></td>
<td>Defective switch assembly</td>
<td>Replace switch assembly</td>
</tr>
</tbody>
</table>
PARTS BREAKDOWN & ASSEMBLY

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART#</th>
<th>DESCRIPTION</th>
<th>ITEM</th>
<th>QTY</th>
<th>PART#</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>77-50141W-30</td>
<td>Motor End</td>
<td>25</td>
<td>16</td>
<td>77-50141W-02</td>
<td>Screw M4 x 12</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>77-50141W-06</td>
<td>M8 x 25 Bolt</td>
<td>26</td>
<td>16</td>
<td>77-50141W-03</td>
<td>Spring Washer M4</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>77-50141W-05</td>
<td>Spring Washer M8</td>
<td>27</td>
<td>1</td>
<td>77-50141W-04</td>
<td>End Bearing</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>76-6012-04</td>
<td>Solenoid Assembly</td>
<td>28</td>
<td>2</td>
<td>77-50141W-07</td>
<td>Gasket</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>76-6012-05</td>
<td>Claw</td>
<td>29</td>
<td>1</td>
<td>77-50141W-11</td>
<td>Gear Ring</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>76-6012-06</td>
<td>Self-tapping Screw</td>
<td>30</td>
<td>1</td>
<td>77-50141W-13</td>
<td>Gear Ring - Input/Intermediate</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>77-50141W-29</td>
<td>Tie Bar</td>
<td>31</td>
<td>1</td>
<td>77-50141W-14</td>
<td>Gear Carrier Assembly - Output</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>76-6012-08</td>
<td>Tie Bar with Mile Marker Logo</td>
<td>32</td>
<td>1</td>
<td>76-50256BW-15</td>
<td>Gear Carrier Assembly - Intermediate</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>76-6012-09</td>
<td>Steel Cable 3/8” x 80”</td>
<td>33</td>
<td>1</td>
<td>76-50256BW-16</td>
<td>Gear Carrier Assembly - Input</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>77-50141W-22</td>
<td>Seal Ring</td>
<td>34</td>
<td>1</td>
<td>76-50256BW-17</td>
<td>Gear - Input Sun</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>77-50141W-21</td>
<td>Ring</td>
<td>35</td>
<td>1</td>
<td>76-6012-35</td>
<td>Spacer-sun gear</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>77-50141W-20</td>
<td>Spacer</td>
<td>36</td>
<td>1</td>
<td>77-50141W-18</td>
<td>Gear Bushing</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>77-50141W-23</td>
<td>Drum Assembly</td>
<td>37</td>
<td>1</td>
<td>77-50141W-19</td>
<td>Gear Box Cover</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>77-50141W-26</td>
<td>Screw</td>
<td>38</td>
<td>1</td>
<td>76-6012-38</td>
<td>Mounting Plate-side</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>77-50141W-25</td>
<td>Cable Anchor</td>
<td>39</td>
<td>2</td>
<td>77-50141W-39</td>
<td>Washer M6</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>77-50141W-24</td>
<td>M6 x 12 Screw Grade 8.8</td>
<td>40</td>
<td>2</td>
<td>77-50141W-40</td>
<td>Spring Washer M6</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>77-50141W-28</td>
<td>Brake/Shaft Assembly</td>
<td>41</td>
<td>2</td>
<td>77-50141W-41</td>
<td>Screw M6 x 12</td>
</tr>
<tr>
<td>18</td>
<td>4</td>
<td>76-6012-18</td>
<td>Self-tapping Screw</td>
<td>42</td>
<td>1</td>
<td>76-50251BW-49</td>
<td>Safety Hook</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>77-50141W-08</td>
<td>Clutch Handle</td>
<td>43</td>
<td>1</td>
<td>76-6000-50</td>
<td>Remote Control</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>77-50141W-09</td>
<td>Seal Cover</td>
<td>44</td>
<td>1</td>
<td>77-50141W-51</td>
<td>Hand Strap</td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>76-6012-21</td>
<td>Start-shape Ring</td>
<td>45</td>
<td>1</td>
<td>WH-10</td>
<td>Roller Fairlead</td>
</tr>
<tr>
<td>22</td>
<td>1</td>
<td>76-6012-22</td>
<td>O ring</td>
<td>46</td>
<td>4</td>
<td>77-50141W-46</td>
<td>Washer</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
<td>76-6012-23</td>
<td>Spring Washer</td>
<td>47</td>
<td>4</td>
<td>77-50141W-47</td>
<td>Spring Washer</td>
</tr>
<tr>
<td>24</td>
<td>1</td>
<td>77-50141W-12</td>
<td>Retaining Screw</td>
<td>48</td>
<td>2</td>
<td>77-50141W-48</td>
<td>Screw</td>
</tr>
</tbody>
</table>
Mile Marker/Selectro Hubs and Conversion Kits Limited Warranty

Mile Marker Industries warrants directly to the first purchaser that part numbers 427, 428, and all “Selectro Classic” models will be free from defect in material and workmanship appearing under normal use and service for a period of one year.

Mile Marker Industries warrants directly to the first purchaser that part numbers 426, 438, and 460 will be free from defect in material and workmanship appearing under normal use and service for a period of two years.

Mile Marker Industries warrants directly to the first purchaser that part numbers 104, 302, 423, 430, 435, 436, 449SS, 457, 459SS, 466, 470, 481, 490 and 549 will be free from defect in material and workmanship appearing under normal use and service for as long as said purchaser owns the Premium Locking Hubs.

Mile Marker Industries warrants directly to the first purchaser that all Mile Marker Conversion Kits will be free from defect in material and workmanship appearing under normal use and service for a period of one year.

Warranty registration must be submitted at milemarker.com/warranty within thirty days of purchase by the end user. If you discover a hidden defect, Mile Marker will, as its option, repair or replace the product or necessary replacement parts at no charge to you, provided you remove the product from the vehicle and return it prepaid to Mile Marker Industries. If the product was purchased in the United States, the owner must contact our warranty department to get a Return Goods Authorization (RGA) number before returning the product. If the product was purchased outside the United States, the owner must return the product to the original place of purchase.

Mile Marker Industries Hydraulic Winch Limited Warranty

Mile Marker Industries warrants each winch when used in normal service against factory defects in materials and workmanship to the original commercial and recreational purchaser for the period of five years. New cable assemblies are warranted against defects in workmanship and materials when received by the retail purchaser. There is no applicable warranty for cable assemblies after initial use. Excluded from this warranty are the finish of the winch and any condition Mile Marker determines to have been caused by misuse or abnormal use. Warranty registration must be submitted at milemarker.com/warranty within thirty days by the end user. Warranty submissions must reference winch serial number to be valid. Warranty will only be valid for the original purchaser of the winch and installed on the vehicle for which it was originally registered. The owner will be responsible for removing the winch and returning it to Mile Marker freight prepaid unless a determination is made that replacement parts can be sent out which will remedy the problem. Mile Marker will repair or replace any or all winch parts, which after inspection determines to be defective. If the product was purchased in the United States, the owner must contact our warranty department to get a Return Goods Authorization (RGA) number before returning the product. If the product was purchased outside the United States, the owner must return the product to the original place of purchase.

Mile Marker Industries Electric Winch Limited Two Year Warranty

Mile Marker Industries offers a limited two year warranty to the original retail purchaser for each new Mile Marker electric winch, used as a recreational recovery winch only, against manufacturing defects in workmanship and materials on all mechanical components. Electrical components consisting of motors, solenoids, wiring, wire connectors and associated parts have a limited one year warranty. New cable assemblies are warranted against defects in workmanship and materials when received by the retail purchaser. There is no applicable warranty for cable assemblies after initial use. Excluded from this warranty are the finish of the winch and any condition Mile Marker determines to have been caused by misuse or abnormal use. Warranty registration must be submitted at milemarker.com/warranty within thirty days by the end user. Warranty submissions must reference winch serial number to be valid. Warranty will only be valid for the original purchaser of the winch and installed on the vehicle for which it was originally registered. The owner will be responsible for removing the winch and returning it to Mile Marker freight prepaid unless a determination is made that replacement parts can be sent out which will remedy the problem. Mile Marker will repair or replace any or all winch parts, which after inspection determines to be defective. If the product was purchased in the United States, the owner must contact our warranty department to get a Return Goods Authorization (RGA) number before returning the product. If the product was purchased outside the United States, the owner must return the product to the original place of purchase.

For full warranty and general warranty procedure and policy visit milemarker.com/warranty