

# OPERATOR'S MANUAL

INSTALLATION • OPERATION • MAINTENANCE  
SAFETY PRECAUTIONS • REPAIR PARTS

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**WESTERN MULE**

FOLD - **A** - WAY  
CRANE

## P7 / P10 / M1000 SERIES

Available at Contractor's Solutions [www.contractors-solutions.net](http://www.contractors-solutions.net)

SERIAL NO. \_\_\_\_\_

### **▲ CAUTION**

THIS EQUIPMENT CAN BE POTENTIALLY DANGEROUS. THIS MANUAL MUST BE STORED WITH THE EQUIPMENT. ALL INFORMATION AND INSTRUCTIONS CONTAINED IN THIS MANUAL MUST BE READ IN FULL BY ALL OPERATORS OF THIS SYSTEM, AS WELL AS PERSONNEL SUPERVISING THE OPERATION OF THIS EQUIPMENT. FAILURE TO DO SO MAY RESULT IN UNSAFE CONDITIONS THAT COULD RESULT IN INJURY OR DEATH. IF ANY INSTRUCTIONS ARE UNCLEAR, CONTACT THE MANUFACTURER FOR CLARIFICATION PRIOR TO USE OF THE CRANE.

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# **READ THIS FIRST**

**THIS MANUAL CONTAINS VERY IMPORTANT INFORMATION ABOUT THE INSTALLATION AND OPERATION OF YOUR WESTERN MULE CRANE. FOR YOUR OWN SAFETY AND THAT OF FELLOW WORKERS, READ THIS MANUAL COMPLETELY PRIOR TO ATTEMPTING INSTALLATION OR OPERATION OF THE WESTERN MULE CRANE.**

The information in this manual is intended to help ensure that your Western Mule Crane is installed properly and operated safely.

Although every effort has been made to make this manual complete and understandable, it is not a definitive guide to every possible situation or circumstance.

The safe operation of this product is directly dependent on the operator's skill, knowledge and judgment.

To avoid hazardous situations, every operator must be knowledgeable with appropriate safety guidelines, codes and regulations that are applicable. Remember that a uniformed or careless operator can make the operation of any equipment dangerous.

Ultimately the owner/operator must make the final decision as to how this product will be used and whether that intended use is safe. Keep in mind that every piece of equipment has its limitations.

After reading this manual in its entirety, should you have any questions regarding the installation or the safe use/operation of a Western Mule Crane, contact your Dealer or Western Mule Cranes Customer Service Department for assistance.

Replacement manuals are available from your Dealer or:

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# A WORD TO THE OWNER/EMPLOYER, OPERATOR AND SERVICE PERSONNEL ABOUT SAFETY

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This manual was written with the safety of the operator and others who work around this equipment as our goal.

**IT IS THE OWNER/EMPLOYERS' RESPONSIBILITY** to know the specific requirements, governmental regulations, precautions and work hazards which may exist. You should make these known to all personnel who are working with the equipment or in the work area so that all necessary precautions and required safety procedures are followed. Failure to heed these instructions can result in serious personal injury and or death.

**IT IS THE OWNER/EMPLOYERS' RESPONSIBILITY** to instruct and insure that all operators understand the safe operation of the Western Mule Crane and to provide the operator with properly maintained equipment.

Anyone who will operate, service or work around this crane should first read and fully understand this manual. Death or serious personal injury can result from improper use or maintenance of this Western Mule Crane.

**IT IS YOUR RESPONSIBILITY** to operate and maintain your Western Mule Crane with skill, good judgment and caution. Following recognized safety procedures will help prevent accidents. Modification to any part of the Western Mule Crane can create a safety hazard and therefore shall not be made without the manufacturer's prior approval. Use only factory-approved parts to repair or maintain the Western Mule Crane.

Keep children, visitors, and unauthorized personnel away from the work area.

**Be capable, careful, and concerned!**

**Make safety your everyday business!**

# INTRODUCTION

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**WESTERN MULE CRANES** have been engineered to provide safe, trouble-free, dependable service for many years when these products are properly used and maintained.

To assist you in obtaining the best service from your crane and to avoid untimely failure of the unit and/or the vehicle on which it is mounted, the following operating and service instructions are herein published. It is specifically recommended that all operating and service personnel consider this manual as mandatory material for reading and study before operating or servicing of Western Mule Products. It is highly recommended that crane owner, equipment managers, and supervisors also read this manual.

Remember that the crane adds weight to the vehicle and may change the driving and riding characteristics of the vehicle on which it is mounted. The payload of the vehicle is also reduced by the amount that the crane weighs and as the vehicle is loaded, care should be exercised not to overload the vehicle. Exercising care in distributing the payload on the vehicle will greatly improve the driving and riding characteristics of the vehicle.

## **CAUTION**

**BE SURE THAT WITH THE ADDITIONAL WEIGHT OF THE CRANE, YOU DO NOT EXCEED THE MAXIMUM GROSS VEHICLE WEIGHT RATING FOR THE VEHICLE.**

In the event that Western Mule Cranes receives a warranty claim, it is our policy to respond to the claim as promptly as possible. If material or workmanship is in question, immediate corrective action shall be taken. It is therefore understandable that **Western Mule Cranes will not assume responsibility or liability when one of our products has obviously been abused, misused, overloaded or otherwise damaged by inexperienced persons trying to operate the equipment without having read this manual.** The Western Mule is designed and built to be safe and efficient.

**Western Mule Cranes will not assume responsibility or liability for any unit which has been modified, changed, or has unauthorized, unapproved components installed.**

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# INTRODUCTION

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Western Mule Cranes maintains a strong Distributor network and knowledgeable Customer Service Department. In most cases, equipment related problems can be solved through a telephone conversation with a service representative. If through no fault of Western Mule Cranes it becomes necessary to send an experienced factory technician on a field call, all charges incurred will be billed to the customer.

The Occupational Health and Safety Act of 1970 states that it is the employer's responsibility to provide a work place free of hazard. To accomplish this, all equipment should be installed, operated and maintained in compliance with applicable trade, industrial, federal, state and local regulations. It is the responsibility of the equipment owner to obtain copies of these regulations and, from these, to determine the suitability of the equipment for any particular use.

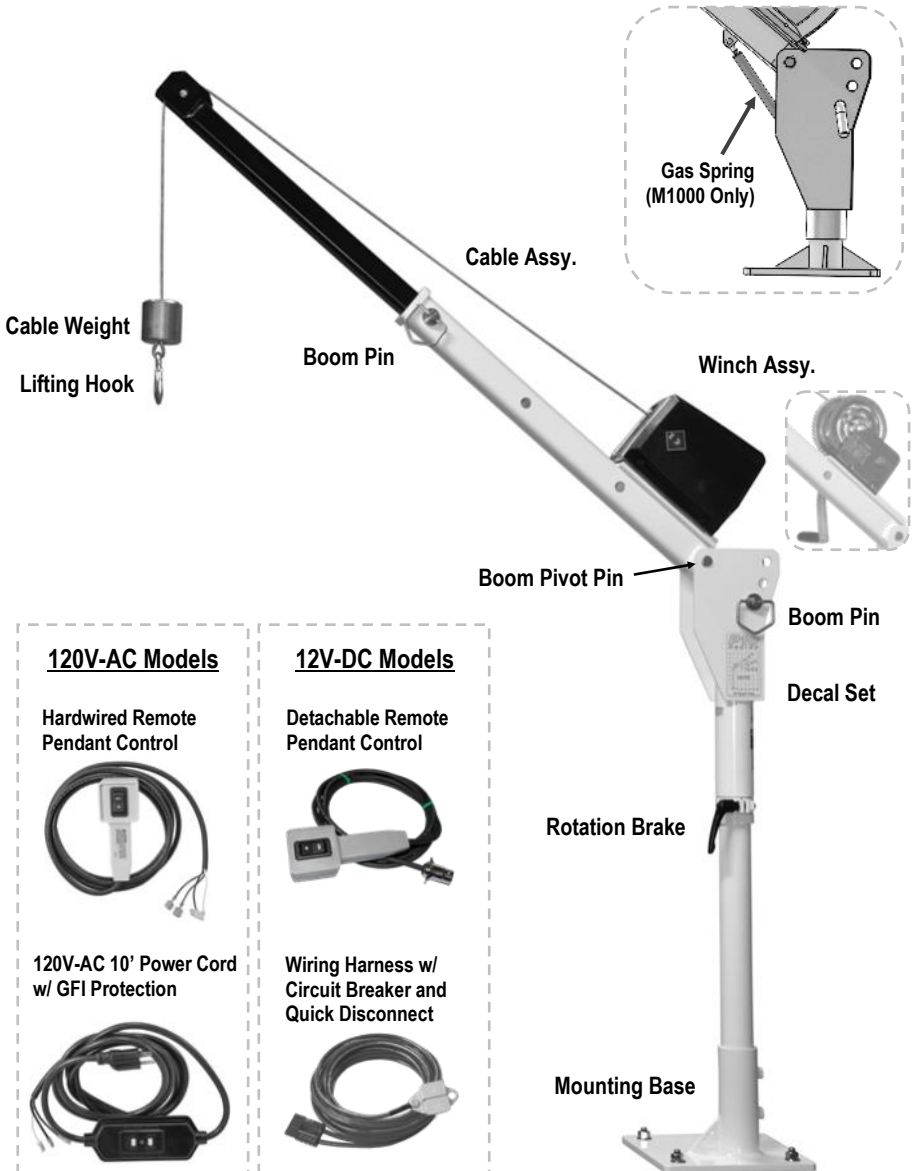
This operator's manual and all labels attached to the product are intended to serve as guidelines for hazard free installation, operation and maintenance. They are not however, intended to prepare the user for every possible situation.

It is the responsibility of the equipment owner to keep this operator's manual and all labels legible and available with the crane at all times. If they should become lost or illegible, immediately order replacements from the manufacturer.

The material herein does not imply to cover all maintenance instructions, operating instructions, or variations to every possible situation. If additional information is required, please refer to Western Mule Cranes at the following telephone number (559)266-6977. The information contained in this manual was in effect at the time of printing. Western Mule Cranes reserves the right to update this manual at any time without notice.

# ILLUSTRATION

Refer to this illustration until you become familiar with the operation of the crane.



# GENERAL OPERATION

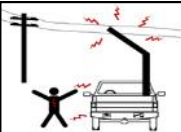
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## ⚠ CAUTION

THE FOLLOWING CONTAINS SOME GENERAL PRECAUTIONS THAT MUST BE CAREFULLY FOLLOWED WHEN INSTALLING, OPERATING, OR MAINTAINING A WESTERN MULE CRANE.

This Crane **must be** operated by persons both qualified and trained in its safe use in accordance with the manufacturer's instructions and applicable governmental safety requirements.

**READ AND OBEY ALL** information contained in this operator's manual and on all placards and decals attached to the Western Mule Crane. A careless or untrained operator can make the use of any equipment dangerous and may cause property damage, serious personal injury, and/or death.



<b>⚠ DANGER</b>
<b>ELECTROCUTION HAZARD THIS MACHINE IS NOT INSULATED DEATH OR SERIOUS INJURY</b>
Will result from boom, lifting cable, rigging, load being hoisted or any part of this machine contacting electrical lines or electrical circuits. Do not operate closer than 10 feet from High Voltage Lines.

**KEEP ALL** bystanders clear of the operation area to prevent obstruction of the operation and/or to avoid serious personal injury and/or death.

**KEEP** hands away from sheaves, lifting cable, pinch points and moving parts of the crane, which may cause serious personal injury and/or death.

**ALWAYS** be certain the rigging that you intend to use is capable of withstanding the load. Never wrap the lifting cable around load. This will cause damage to the lifting cable and may result in equipment failure.

**DO NOT** divert your attention from the Western Mule Crane while an operation is being performed.

**CONSTANTLY** check for signs of damage or poor operation. Make sure that the load remains unobstructed and securely attached.

**AVOID** lifting loads over bystanders or the operator. Doing so may cause serious personal injury and/or death to the operator or bystanders.

**NEVER** operate the crane in the stored position. Cable failure will result!



# GENERAL OPERATION

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**TAKE CAUTION** to avoid continuous use of the crane to prevent overheating of the electric motor.

**DO NOT** operate the Western Mule Crane if signs of damage or poor operation are noticed. To do so may result in property damage, serious personal injury, and/or death. Place a “**DO NOT USE - CRANE OUT OF ORDER**” sign on the Western Mule Crane and in the vehicle. Do not use the crane or remove these signs until the Western Mule Crane has been repaired by a qualified maintenance person who has inspected the crane and completely corrected the problem.

**KNOW** the weight of the load you are lifting to avoid overloading the Western Mule Crane.

**DO NOT** overload the Western Mule Crane or exceed the load rating of the weakest component in the system (I.E. the lifting cable, sling, lifting attachment, etc.). Overloading may result in damage and/or failure of the equipment, which may lead to serious personal injury and/or death.

**DO NOT** use two cranes to move a load that is greater than the load rating of a single crane. A shift in the load may place all of the weight on one crane, which may overload the equipment and/or cause it to fail.

**ALWAYS** maintain a minimum of five (5) wraps of lifting cable on the winch drum. Operating the crane with less than five wraps of lifting cable on the winch drum may cause the crane to fail or cause serious personal injury and/or death.

**ALWAYS** keep your hands away from the lifting cable while tensioned and other moving parts while in use.

**NEVER** handle the lifting cable/rigging while someone else is at the controls.

**DO NOT** shock load/bounce or swing the load. Such violent motions may momentarily exceed the cranes maximum load rating. Overloading the Western Mule Crane may cause the crane to fail or cause serious personal injury and/or death.

**DO NOT SIDE LOAD THE WESTERN MULE CRANE.** The Crane shall not be used for dragging or pulling loads sideways across a surface. To do so may strain the equipment resulting in its damage and/or failure.

**DO NOT** alter or modify the Western Mule Crane or any of its components. Do not operate the crane using any form of power other than that which it is specifically intended to be used. To do so may reduce the load rating of the crane and/or cause the crane to fail.

# SETTING UP VEHICLE AT THE JOB SITE

---

## CAUTION

ONE OF THE MOST IMPORTANT PREREQUISITES TO PROPER SETUP ON THE JOB SITE IS TO THOROUGHLY PLAN THE LIFT BEFORE POSITIONING THE VEHICLE.

1. Vehicle should be positioned in an area free from obstructions to allow performance of the entire task without repositioning the vehicle
2. The vehicle brakes shall be set.
3. Wheel chocks (blocks) shall be installed prior to using the Western Mule Crane.
4. **ALWAYS** remove the vehicles keys from the ignition. All keys shall be in the possession of the worker designated to be responsible for the operation of the Western Mule Crane.
5. **INSPECT** the Western Mule Crane before operation.  
Any defects should be corrected immediately.
6. **ALWAYS** Position tip of boom directly over load to be hoisted.

## MAKING THE LIFT

---

This section is designed to present some of the general precautions that must be taken by the operator while operating the Western Mule Crane.

**WEAR** a protective hard hat while raising loads.

**NEVER** stand beneath a load.

**DO NOT** exceed load limits of the Western Mule Crane as shown on the warning decals.

**NOTE:** Crane ratings are based upon the crane's lifting capacity, not the crane's stability.

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# MAKING THE LIFT

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**KEEP** tension on the lifting cable at all times.

**NEVER** wrap lifting cable around load.

**NEVER** pull the cable weight against the tip of the boom.

**ALWAYS** center the tip of the boom over the load to be lifted.

**NEVER** attempt to side load, drag or pull loads across a surface.

**NOTE:** To do so may strain the crane, resulting in damage and/or failure

**ALWAYS** maintain a minimum of five (5) wraps of lifting cable on the winch drum.

**BE SURE** that the load is well secured and properly balanced in the sling or lifting device before it is lifted more than a few inches.

**ALWAYS** allow the load to come to a full stop before reversing direction.

**NEVER** raise the load being lifted any higher than necessary when moving the load.

**KEEP** work area clear. **DO NOT** allow unauthorized people in the work area while lifting a load.

**NEVER** place a chain link on the tip of the lifting hook or attempt to lift a load from the tip of the lifting hook.

**DO NOT** leave a suspended load unattended.

**DO NOT** attempt any service or repair while the Western Mule Crane is in operation.

**NEVER** use a sling or anything larger than the hook throat that could prevent the latch from closing when lifting a load.

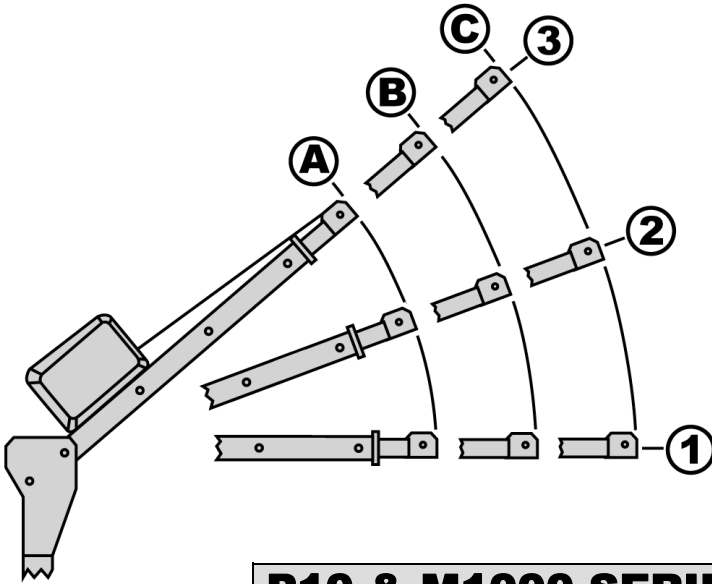
## **WINCH SMOKE** *(Electrically Operated Models)*

**Smoke being emitted from the winch housing is normal.**

The disk brake assembly gets extremely hot during operation. Contaminants and grease from the drive gears may come in contact with the brake disk and cause smoke and/or odor to emit from the winch.

# LOAD CHARTS

Please refer to the Load-Chart below to determine the rated lifting capacity of each boom position. Never exceed the lifting capacity specified for a given boom position!



<b>P10 &amp; M1000 SERIES</b>			
Boom Position	A	B	C
<b>3</b>	1000	870	800
<b>2</b>	1000	835	700
<b>1</b>	1000	800	600



<b>P7-VAN</b>			
Boom Position	A	B	C
<b>3</b>	700	685	675
<b>2</b>	700	675	650
<b>1</b>	700	665	625

<b>P10-VAN</b>			
Boom Position	A	B	C
<b>3</b>	1000	900	800
<b>2</b>	1000	885	775
<b>1</b>	1000	875	750

# LEAVING THE JOB SITE

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1. Return the boom to its stored position, folded parallel with the mast.
2. Disconnect and store the pendant control (12V-DC Models).
3. Report any unusual occurrence during operation of the crane that may require maintenance or repair.

## CAUTION

NEVER MOVE VEHICLE WITH THE BOOM IN ITS RAISED POSITION, OR WITH LOAD SUSPENDED FROM IT.

# ROTATION BRAKE

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The crane is equipped with a Rotation Brake. This feature offers an advantage in many lifting and lowering situations, where it may be desirable to hold the boom in a fixed point of rotation.

**When using the Rotation Brake:**

**NEVER attempt to drag a load** or induce any side loading to the boom.

**NEVER** swing a load suspended from the lifting cable while the Rotation Brake is engaged or at any time while a load is suspended.

**NEVER** work on a load while it is suspended on the lifting cable.

**DO NOT** engage the Rotation Brake while the mast/boom are rotating. Always bring the rotation of the mast/boom to a halt prior to engagement of the Rotation Brake.

## CAUTION

**MAXIMUM CONTINUOUS RUN TIME OF 4 MINUTES (ELECTRIC MODELS).**  
CONTINUOUS RUNNING IN EXCESS OF 4 MINUTES EXCEEDS THE DUTY CYCLE OF THE MOTOR AND CAN CAUSE DAMAGE.

# AUXILIARY CRANK HANDLE

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The electrically powered cranes are equipped with an emergency hand crank handle that can be used in the event of power failure.

Remove the plastic plug from the side of the winch housing and insert the handle so that it completely engages with the drive shaft. The handle can be cranked in either direction.

## DANGER

NEVER OPERATE THE WINCH ELECTRICALLY WITH THE EMERGENCY CRANK HANDLE INSTALLED. DOING SO IS DANGEROUS AND **MAY CAUSE INJURY!**

## FURTHER SUGGESTIONS

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This section is designed to present some of the general precautions that must be taken by the operator when making a lift with the Western Mule Crane.

**WEAR** a protective hard hat while raising loads.

**NEVER** stand beneath a load.

**DO NOT** exceed load limits of the Western Mule Crane as shown on the warning decals.

**NOTE:** Crane ratings are based upon crane lifting capacity, not crane stability.

**ALWAYS** use an outrigger (support leg) from the vehicle's chassis to the ground during crane operation. Insure that it is firmly positioned on a solid footing.

**ALWAYS** secure the Boom Pin with the hairpin cotter.

**KEEP** tension on the lifting cable at all times.

**NEVER** wrap lifting cable around load.

**DO NOT** stand between the load and the vehicle.

**NEVER** pull the lifting hook or hook eye fittings into the boom sheaves.

**ALWAYS** center the tip of the boom over the load to be lifted.

**NEVER** attempt to side load, drag or pull loads across a surface. To do so may strain the crane, resulting in damage and/or failure.

**ALWAYS** maintain a minimum of five (5) wraps of lifting cable on the winch drum.

**KEEP** tension on the lifting cable at all times.

**BE SURE** that the load is well secured and properly balanced in the sling or lifting device before it is lifted more than a few inches.

**ALWAYS** allow the load to come to a full stop before reversing direction.

**NEVER** raise the load being lifted any higher than needed when moving the load.

**KEEP** work area clear. **DO NOT** allow unauthorized people in the work area while lifting a load.

**NEVER** place a chain link on the tip of the lifting hook or attempt to lift a load from the tip of the lifting hook.

**DO NOT** leave a suspended load unattended.

**DO NOT** tow another vehicle with the crane.

**DO NOT** attempt any service or repair while the Western Mule Crane is operating.

**NEVER** use a sling or anything larger than the hook throat that could prevent the latch from closing when lifting a load.

# PREPARING FOR INSTALLATION

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## CAUTION

THE MANUFACTURER CANNOT FORESEE THE MANY VARYING TYPES OF PLATFORMS THAT INSTALLATIONS MAY BE PERFORMED ON. EACH INSTALLATION SHOULD BE EVALUATED BEFOREHAND TO ENSURE THAT THE STRUCTURAL INTEGRITY OF THE VEHICLE/PLATFORM IS SUFFICIENT TO HANDLE THE EXTRA WEIGHT OF THE WESTERN MULE CRANE MOUNTED AND THE LOADS BEING LIFTED BY THE CRANE.

The vehicle or platform that the crane shall be mounted to must be in structurally sound condition. Reinforcement may be necessary.

**BEFORE** installing the Western Mule Crane, consult applicable codes and regulations for specific instructions and rules regarding the installation of mobile cranes.

**DO NOT** install the Western Mule Crane in an area that contains corrosive chemicals, combustible materials, explosives or other elements which may cause property damage, serious personal injury and/or death.

**DO NOT** install the Western Mule Crane on a vehicle or platform that is not in good sound mechanical working condition.

**BEFORE** placing the Western Mule Crane into service, thoroughly inspect it.

## INSTALLATION

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1. Un-box the Western Mule Crane and check the packing slip to verify the contents.
2. Determine where the Western Mule Crane is to be mounted, insuring that the structural integrity is sufficient to handle the loads that the vehicle or platform will be subjected to while lifting with the crane.
3. Position the mounting base in desired location to handle your loading needs. Take into consideration where the boom will be stored.
4. Try to anticipate the size of the object to be loaded and load placement.

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# INSTALLATION

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5. It will be necessary to reinforce the underside of the truck bed, bumper, or platform that the crane is being mounted upon. One method is using a bottom plate 3/8" thick or larger, mounted to the underside of the bed, under the crane base plate. The bottom plate should be large enough to cover the 4 holes in the mounting base of the crane and long enough to reach the vehicle frame. Each application will vary.
6. Before drilling holes in mounting location, check underside of bed for location of frame and cross members. Mark and drill holes using base plate as the guide. (**BEFORE DRILLING HOLES**, be sure and avoid wiring, brake and fuel lines, and fuel tanks)
7. Fasten the crane to the vehicle or platform, using no less than 9/16" grade 8 bolts.  
(Refer to table on page 17 for bolt-torque specifications)  
  
*For 120V-AC Models — Skip to Step # 10*  
*For Manual Hand Crank Models — Skip to Step # 11*
8. Route the longest of the two power lead wires from the crane to the circuit breaker at the battery. Secure to frame using wire ties. Avoid routing next to fuel lines, brake lines, fuel tank, exhaust system, or any moving parts. Allow enough extra wire at crane for rotation of crane.

## CAUTION

DO NOT TIE WIRE TO ANY PART OF FUEL SYSTEM OR BRAKE SYSTEM. KEEP WIRE AWAY FROM HOT OR MOVING PARTS. DO NOT OPERATE WINCH WITHOUT CIRCUIT BREAKERS OR DO NOT BYPASS BREAKERS. BYPASSING CIRCUITS CREATES A FIRE HAZARD AND IS DANGEROUS TO THE PERSONAL SAFETY OF THE OPERATOR

9. Attach circuit breaker to positive lead and to positive side of battery.  
(Refer to diagram on bottom of page 17)
10. Route ground wire to the chassis or battery and attach securely. Allow enough extra wire at the crane to the bed for the crane to rotate. Secure the wires so as they do not make contact with any hot or moving parts.
11. Inspect crane fully before placing in operation
12. Your crane is now ready for operation. Refer to operation section of this manual before operating. Read it carefully and follow all instructions for proper and safe procedures.

**Always inspect crane fully before placing in operation.**



# BOLT-TORQUE SPECIFICATIONS

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**Table 1**

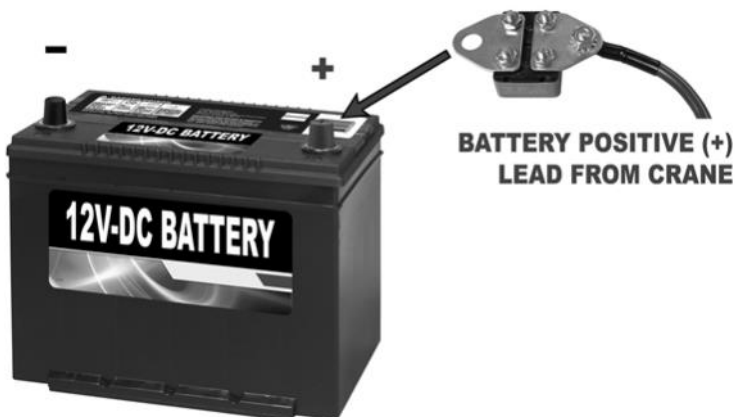
UNC Size	Grade 8 Tightening Torque
9/16" - 12	150 +/- 15
5/8" - 11	215 +/- 15

**NOTE:** Torque values are in foot-pounds. Torque values specified are with residual oils or no special lubricants applied to the bolts. If special lubricants of high stress ability, such as never-seize compound, graphite, oil or molybdenum disulfide, etc. are used multiply the torque figures in the chart by a factor of .90.

Torque values for bolts listed above are not affected with the use of Loctite or similar thread locking product. Hardened washers should be used with Grade 8 or better bolts.

# ELECTRICAL (12V-DC MODELS)

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# DAILY INSPECTION

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## **WARNING**

SAFE OPERATION **DEPENDS ON YOU**, THE CONDITION OF YOUR EQUIPMENT AS WELL AS YOUR MAINTENANCE AND INSPECTION PROCEDURES.

The single most important factor in the prevention of equipment failures and accidents is a positive attitude towards safety. The habit of anticipating possible problems normally prevents many accidents from occurring.

**The crane shall be inspected by the user daily before each use and additionally by a competent person other than the user at periodic intervals.**

Inspection checks **must be** performed. Below is a list of several important inspections that should be performed before and during **each** operation of the Western Mule Crane. Inspection checks **must be** performed.

Below are several important inspections that should be performed before and during **each** operation of the Western Mule Crane.

1. **FASTENERS** – visually check all pins, retainers, bolts and nuts. Check for presence and proper tightness.
2. **SHEAVES** – check for lifting cable wear, cracks and ease of rotation. If they do not turn freely or the bushings in the sheaves are worn, replace them immediately.
3. **LIFTING CABLE** – check for frayed edges, broken strands, kinks and flat spots. If damaged, replace before use. (*See page 20 for cable inspection procedures*)
4. **WINCH** – check lifting cable for proper spooling on the winch drum.
5. **CRANE HOOKS** – check hook and safety latch, for twist or distortion. (*See page 20 for hook inspection procedures*)
6. **OPERATING PLACARDS AND SAFETY DECALS** – check for missing, illegible or defaced decals and placards.
7. Make necessary repairs of the above items or replace before operating the Western Mule Crane.

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# DAILY INSPECTION

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The Manufacturer recommends and government regulations require that an employer shall perform frequent and periodic inspections and maintain results of these inspections for each Western Mule Crane. Additionally, a competent person shall make a thorough annual inspection of the crane. The employer shall maintain a record of the dates and results of the inspections for each crane and its optional equipment.

## **WARNING**

**DO NOT OPERATE THE WESTERN MULE CRANE IF SIGNS OF DAMAGE OR POOR OPERATION, ARE NOTICED. TO DO SO MAY RESULT IN PROPERTY DAMAGE, SERIOUS PERSONAL INJURY AND/OR DEATH. PLACE A “DO NOT USE CRANE OUT OF ORDER” SIGN ON THE WESTERN MULE CRANE AND IN THE VEHICLE. Do not use the crane or remove these signs until the Western Mule Crane has been repaired by a qualified maintenance person who has inspected the crane and completely corrected the problem.**

# INSPECTION OF LIFTING CABLE AND HOOK

## CAUTION

ALWAYS WEAR SOME FORM OF HAND PROTECTION. LIFTING CABLE CAN CAUSE SERIOUS INJURY TO YOUR HANDS.

Many variable factors can cause the deterioration of the lifting cable that it is not possible to pre-determine a definite life expectancy.

Some of the contributing factors are:

1. Load being lifted
2. Corrosive conditions
3. Maintenance of the Western Mule Crane
  - a. Sheaves not turning freely
  - b. Improper spooling on winch drum.
  - c. Kinks in lifting cable
  - d. Abrasive action and contact with sharp corners.
4. Storing crane with lifting cable excessively tight.
5. Frequency of use

Keeping the working load ratings in mind and knowing the kind of loads that will be handled, the user should regularly inspect the lifting cable to determine when it should be replaced.

Items to look for while inspecting lifting cable are:

1. Broken strands
2. Kinks and flattened sections
3. Corrosion and abrasion
4. Distortion of the lifting cable, such as kinking, crushing, etc.

Items to look for while inspecting the lifting hook are:

1. Bent or twisted hook
2. Damaged or non-operable safety latch
3. Hook is securely attached to the lifting cable

## WARNING

STOP USING THE HOIST AND REPLACE THE LIFTING CABLE OR HOOK IF ANY OF THE DEFECTS LISTED ARE FOUND.

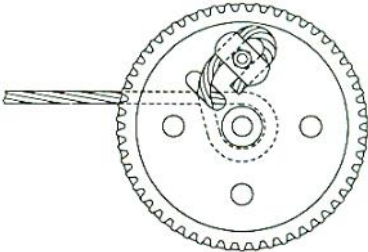
# CABLE REPLACEMENT

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The lifting cable must be installed and spooled as shown in the illustration below, or the hoists braking mechanism **MAY NOT FUNCTION**.

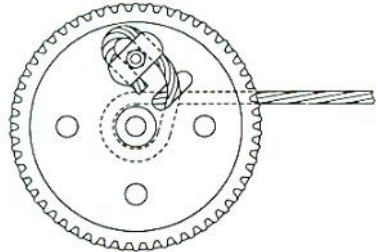
If it becomes necessary to replace the lifting cable, use only the minimum recommended cable size for your crane model as noted on the cranes serial plate.

**12V-DC & 120V-AC**



Attaches on left side of drum

**MANUAL HAND CRANK**



Attaches on right side of drum

When inserting the lifting cable into the drum, insert it into the correct end of the hole as shown above. Tighten the set screw securely.

With the end of the cable securely installed, carefully wind the length of the lifting cable onto the drum.

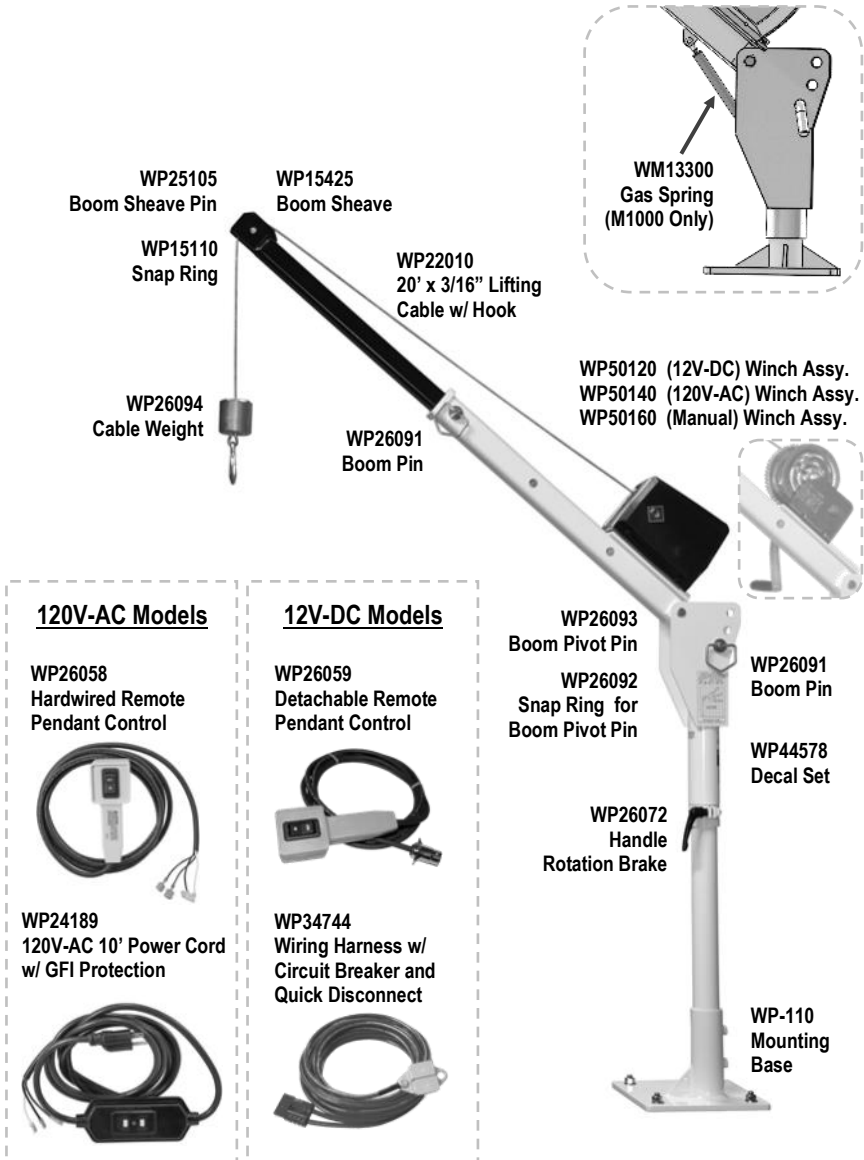
**NOTE:** Lifting cable must ALWAYS spool from top of drum as shown above.

## CAUTION

ALWAYS WEAR SOME FORM OF HAND PROTECTION. LIFTING CABLE CAN CAUSE SERIOUS INJURY TO YOUR HANDS.

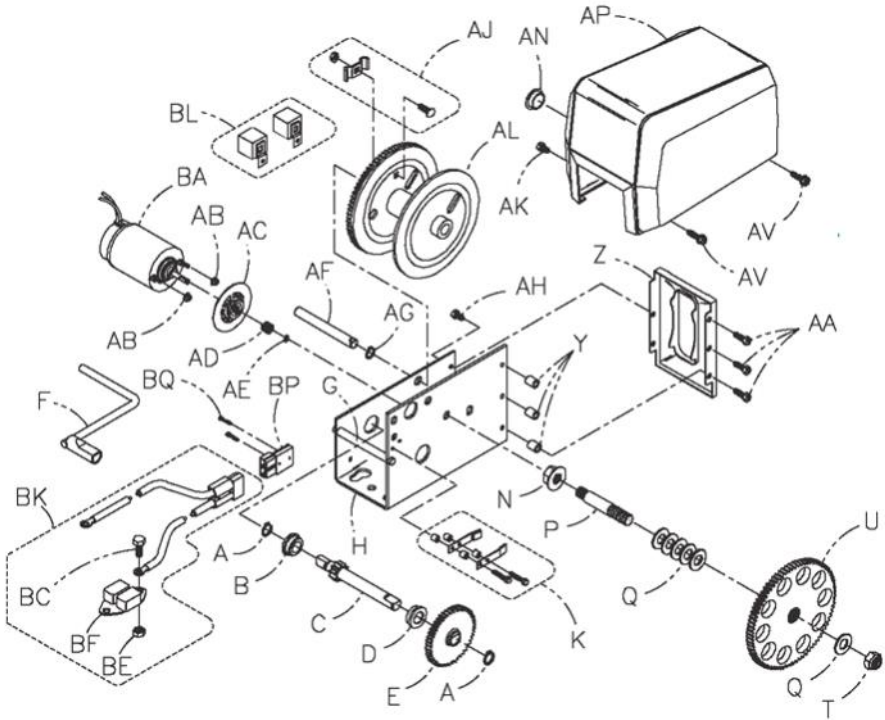
# REPLACEMENT PARTS

When ordering parts, please supply your crane's model and serial number. Parts may be obtained through your local dealer or distributor.



# 12V-DC HOIST PARTS

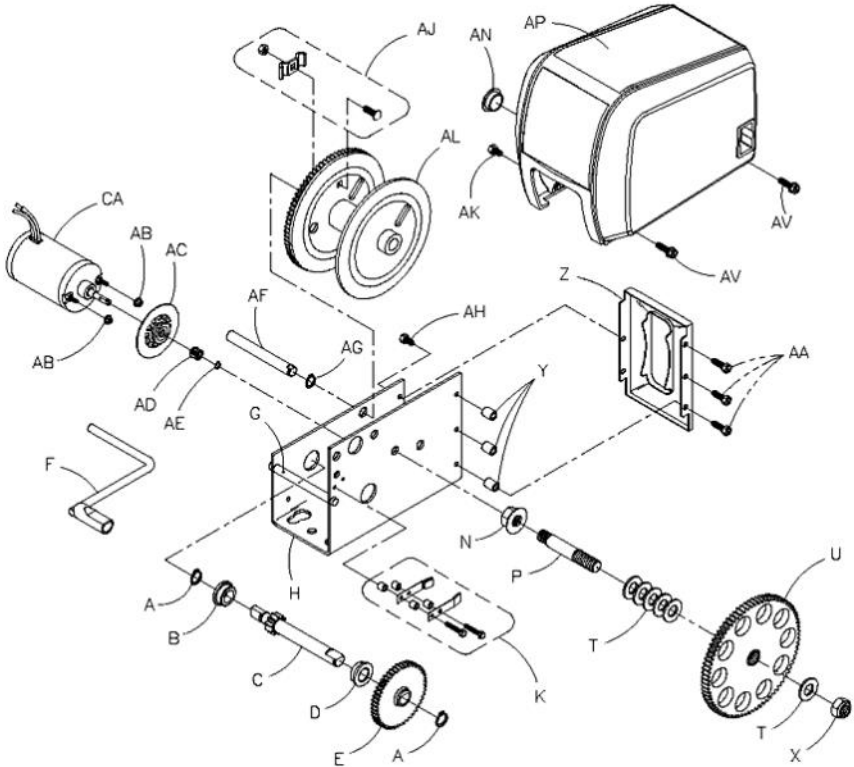
When ordering parts, please supply your crane's model and serial number. Parts may be obtained through your local dealer or distributor.



<u>Ref Part</u>	<u>Number</u>	<u>Ref Part</u>	<u>Number</u>	<u>Ref Part</u>	<u>Number</u>
A	Retaining Ring (2)	WP34191	Z	Front Plate	WP34553
B	Bushing	WP34012	AA	Screw, 1/4 - 20x5/8 (3)	WP25238
C	Drive Shaft Assy.	WP34813	AB	Locknut, 10-32 (2)	WP25193
D	Bushing	WP24009	AC	Brake Disc Assy.	WP34407
E	56T Gear	WP24703	AD	Motor Pinion	WP44522
F	Auxiliary Handle Assy.	WP34412	AE	"E" Ring	WP25135
G	Base Spacer	WP44557	AF	Reel Shaft	WP44559
H	Base	WP44922	AG	Retaining Ring	WP24468
K	Brake Spring Kit	WP34411	AH	Screw, 1/4 - 20x3/8 (2)	WP25337
N	Locknut	WP25192	AJ	Cable Clamp Kit	WP34617
P	Shaft	WP44535	AK	Screw, 1/4 - 20x3/4 (2)	WP25338
Q	Thrust Bearing Kit (Includes Item T)	WP24360	AL	Reel Assy.	WP34812
U	120T Gear Assy.	WP34414	AN	Cover Plug	WP24713
Y	Front Plate Spacer (3)	WP44562	AP	Cover	WP44990
			AV	Screw, 1/4 - 20x7/8 (2)	WP25242
			BA	Motor Assy.	WP34973
			BL	Relay (ea)	WP304972-2
			BF	Circuit Breaker	WP63320
			BK	Power Cord w/ Plug & Circuit Breaker	WP34744
			BP	Power Plug 2-Prong (Male or Female)	WP26055
				Remote Pendant Control	WP26059

# 120V-AC HOIST PARTS

When ordering parts, please supply your crane's model and serial number. Parts may be obtained through your local dealer or distributor.

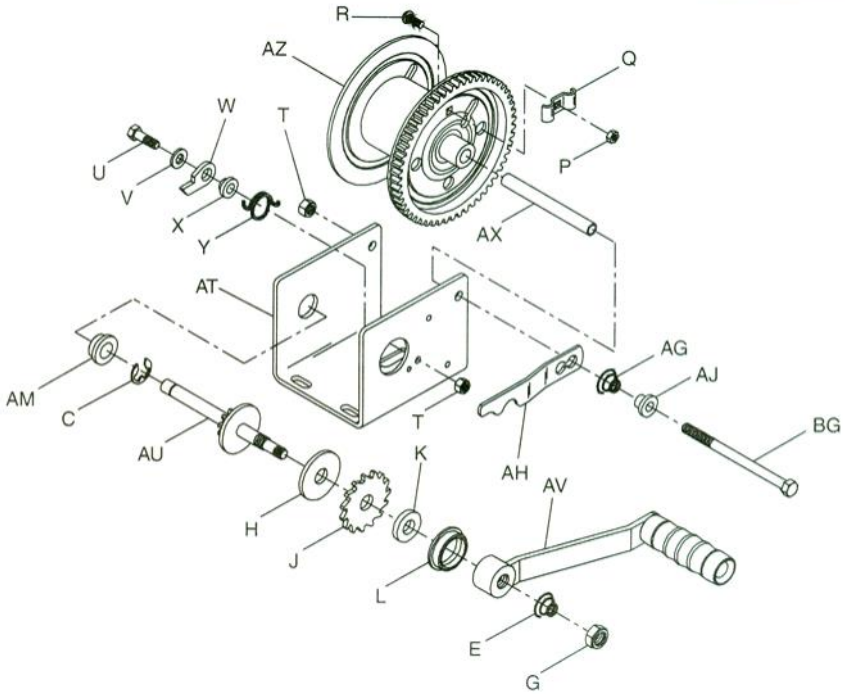


<u>Ref Part</u>	<u>Number</u>	<u>Ref. Part</u>	<u>Number</u>	<u>Ref Part</u>	<u>Number</u>
A	Retaining Ring (2)	WP34191	AA	Screw - 1/4 - 20x5/8 (3)	WP25238
B	Bushing	WP34012	AB	Locknut, 10-32 (2)	WP25193
C	Drive Shaft Assy.	WP34813	AC	Brake Disc Assy.	WP34407
D	Bushing	WP24009	AD	Motor Pinion	WP44522
E	56T Gear	WP24703	AE	"E" Ring	WP25135
F	Auxiliary Handle Assy.	WP34412	AF	Reel Shaft	WP44559
G	Base Spacer	WP44557	AG	Retaining Ring	WP24468
H	Base	WP44922	AH	Screw, 1/4 - 20x3/8 (2)	WP25337
K	Brake Spring Kit	WP34411	AJ	Cable Clamp Kit	WP34617
N	Locknut	WP25192	AK	Screw, 1/4 - 20x3/4 (2)	WP25338
P	Shaft	WP44535			
T	Thrust Bearing Kit (Includes Item X)	WP34360	AL	Reel Assy.	WP34812
U	120T Gear Assy.	WP34414	AN	Cover Plug	WP24713
Y	Front Plate Spacer (3)	WP44562	AP	Cover	WP44638
Z	Front Plate	WP34553	AV	Screw, 1/4 - 20x7/8 (2)	WP25190
			CA	Motor Assy.	WP34321
				GFI Power Cord	WP24189
				Wired Remote	WP26058
				Pendant Control	



# MANUAL HAND-CRANK HOIST PARTS

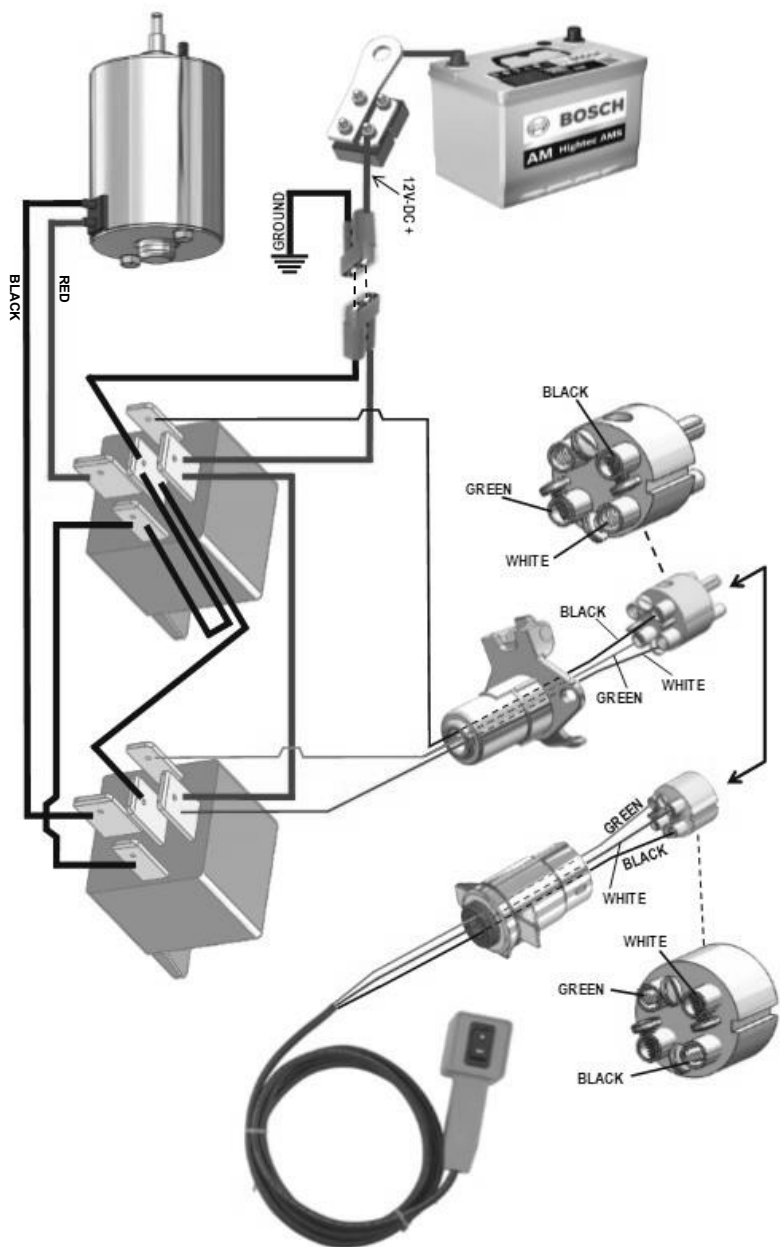
When ordering, please supply your crane's model and serial number.  
Parts may be obtained through your local dealer or distributor.



<u>Ref.</u>	<u>Part</u>	<u>Number</u>	<u>Ref.</u>	<u>Part</u>	<u>Number</u>
C	"E" Ring	WP25116	W	Pawl	WP44409
E	Spring	WP24364	X	Spacer	WP44166
G	Nut	WP25033	Y	Spring	WP24363
H	Pressure Plate	WP24362	AG	Spring	WP24364
J	Ratchet Wheel	WP44164	AH	Lockout Lever	WP44579
K	Pressure Washer	WP44163	AJ	Spacer	WP44166
L	Bushing	WP26328	AM	Bushing	WP24009
P	Nut	WP26225	AT	Base	WP44891
Q	Wire Rope Clamp	WP44043	AU	Drive Shaft	WP34760
R	Carriage Bolt	WP25215	AV	Handle (Crank)	WP53111
T	Locknut	WP24803	AX	Reel Spacer	WP24808
U	Bolt	WP25167	AZ	Reel	WP24808
V	Flat Washer	WP25055	BG	Bolt	WP24804

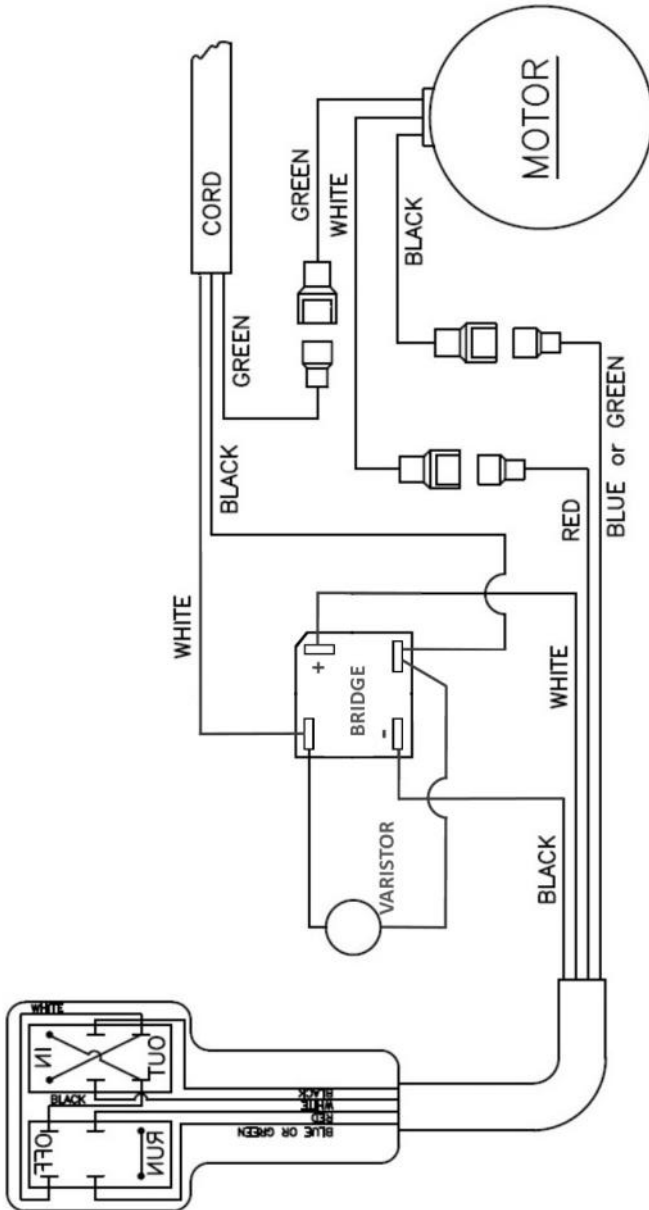
# WIRING SCHEMATIC 12 VOLT-DC POWERED MODELS

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# WIRING SCHEMATIC 120 VOLT-AC POWERED MODELS

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# GENERAL INFORMATION

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The WESTERN MULE P-SERIES CRANE is designed to handle loads up to its rated lifting capacity and rotate right or left 360 degrees, non-continuous.

You **MUST** change rotation direction to keep from damaging the electric power wiring.

Practice using the crane with lighter loads, until you become familiar with the safe operation of the crane.

**DO NOT** overload the Western Mule Crane or exceed the load rating of the weakest component in the system (I.E. the lifting cable, sling, lifting attachment, etc.). Overloading may result in damage and/or failure of the equipment, which may lead to serious personal injury and/or death.

**DO NOT SIDE LOAD THE WESTERN MULE CRANE.** The Crane shall not be used for dragging or pulling loads sideways across a surface. To do so may strain the equipment resulting in its damage and/or failure.

**DO NOT** alter or modify the Western Mule Crane or any of its components. Do not operate the crane using any form of power other than that which it is specifically intended to use. To do so may reduce the load rating of the crane and/or cause the crane to fail.

**MAKE SURE** that at least a minimum of 5 wraps of lifting cable remain on the winch drum at all times in order for the lifting cable to remain securely anchored to the winch drum.

**ALWAYS** return the Western Mule Crane to its stored position before moving the vehicle.

## REPLACEMENT PARTS

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When ordering, please supply your crane's model and serial number. Parts may be obtained through your local dealer or distributor.

## PRODUCT REGISTRATION

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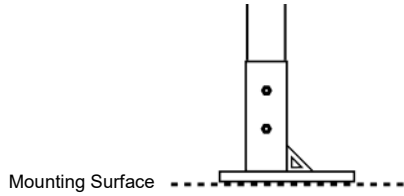
Every effort is made to supply product updates and other information relevant to the use of this crane. To register your crane, we request that you do this online on our *Support Page* at [westernmule.com](http://westernmule.com) and click on Warranty Registration. If you do not have internet access, please call Western Mule Cranes to register your product. (559)266-6977

# COMMON OPTIONS & ACCESSORIES

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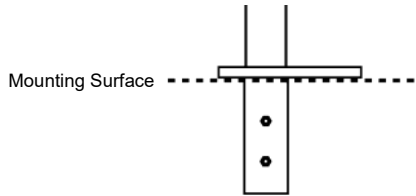
## Extra Standard Base (WP-110)

An extra mounting base can be installed in an alternate location so that the crane may be used in multiple locations.



## Extra Inverted Base (WP-114)

The inverted base allows the socket portion of the crane's base to be mounted below the mounting surface and remains out of the way when the crane is removed from the base. *(Requires a taller mast upgrade option)*



## Fold-Down Outrigger (WP-34)

A bolt-on, spring-loaded outrigger for installation on pickups, service bodies or other mobile platforms. *(Bolts to underbody crane support mount not provided).*



## Optional Mast Heights Available

Please inquire for details or specify when ordering.

# OTHER WESTERN MULE CRANE MODELS

For Pickups, Utility Vehicles, Service Bodies, Flatbeds, Flatbeds, Cube Vans, Cargo Vans & more!

- Models with 750-2500 lb Lifting Capacity



[www.westernmule.com](http://www.westernmule.com)

## **WESTERN MULE CRANES**

1510 Merced Street  
Fresno, CA 93706  
Phone (559)266-6977



FOLD A WAY  
CRANE

# **1 YEAR LIMITED WARRANTY**

The manufacturer, warrants to the original retail purchaser its product, the Western Mule, for twelve months (one year) from the date of delivery that your new Western Mule Crane is free from defects in material and workmanship if properly set up and operated in accordance with the recommendations set forth in the Western Mule Owner's Manual. If a date cannot be established, then the date the product was sold by the Distributor will be used.

Obligation of the manufacturer, under this warranty, is expressly limited to the replacement or repair of parts, which prove defective in material or workmanship for the duration of this warranty. To make a claim under this warranty, the product must be returned, freight prepaid to the manufacturer. The sole measure of damages shall be limited to the price of defective parts.

This warranty does not obligate the manufacturer to bear the cost of labor in the field or transportation charges in connection with replacement or repair of defective parts.

Factory authorized repair or replacement as provided under this warranty is the exclusive remedy to the consumer. The Manufacturer shall not be liable for any incidental or consequential damages or for breach of any express or implied warranty on this product.

Any damage to the Western Mule, as a result of abuse, misuse, overloading, negligence, accidents, improper installation or any unauthorized alteration, repair or modifications made without written authorization by the manufacturer or any act that violates the instructions furnished by the manufacturer, will void the warranty.

NO representative of the manufacturer has the authority to amend or modify the warranty of to bind the company by any other warranty, guarantee or assumption of liability. There are no warranties which extend beyond the above description and it is expressly understood and agreed that no warranty of merchantability or warranty of fitness or particular purpose, or other warranty express, implied or statutory is made.

**FREIGHT CHARGES**—This warranty does not cover freight charges incurred to return defective parts to the manufacturer's location or the shipment of replacement parts to the warranty holder

**EXCLUSION**—There is no warranty on the lifting cable against breakage or fraying.

Certain limitations expressed herein are excludable in accordance with provisions of local law. Such limitations shall be deemed struck if such law is applicable. All other limitations and provisions shall continue to apply.

# MANUFACTURED AND DISTRIBUTED BY

## Western Mule Cranes

1510 Merced Street

Fresno, CA 93706 USA

Ph: 559-266-6977 Fax: 559-266-7437

E-Mail: [cranes@westernmule.com](mailto:cranes@westernmule.com)

[www.westernmule.com](http://www.westernmule.com)

Available at Contractor's Solutions [www.contractors-solutions.net](http://www.contractors-solutions.net)



This product can potentially expose you to chemicals including Chromium, Lead and Nickle which are known to the State of California to cause cancer, birth defects or other reproductive harm.

Metal products, Electrical and Electronic Components, or Production Supplies in general may include some level of substances identified by Proposition 65.

For more information to to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

This warning is provided out of an abundance of caution to fully comply with Proposition 65 Law and as an information service to our customers.

Western Mule Cranes reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations are specifications used.

**Made in the U.S.A.**