# Mud Buddy Longtail Owner's Manual

Thank you for purchasing the most advanced mud motor in the world.

Assembly - Read the instructions inside before installing your motor. Check the crate and engine for damage. Call Mud Buddy and the shipping company immediately if you find any damage or missing items.

Notice: Engine is shipped without oil. Fill before starting. Check oil with engine in level position. Use a good grade of SAE 10W-30 oil.

Engines 16-29 h.p. - 1.4 qt. 9-13 h.p. - 1 qt. 5 - 6.5 h.p. - .6 qt.

# **Kawasaki Notice**

Your engine is equipped with a mercury safety switch which prevents the engine from being started unless the propeller is raised and out of the water.

Kawasaki 29 EFI Notice: Fuel injection system. When new or when in storage for an extended period, bleed the fuel line of air. Remove the fuel line above the fuel filter, turn the key on and pump out 1/4 cup of fuel into a suitable container. Reassemble. The fuel filter may have a little air inside, this is okay. If you run out of fuel the above procedure must be repeated.

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# Warranty

Two Years: (Engine manufacturer provides a 2 year warranty on all engines, except 5 Honda which is one year.)

Mud Buddy warrants that the drive is free from defects in material and workmanship, assuming normal use, for a period of two years from the date of purchase. Warranty does not cover lack of lubrication, abuse or mistreatment.

#### Three Years:

Warrants that the frame is free from defects in material and workmanship, assuming normal use, for a period of three years from the date of purchase

#### Limited Lifetime:

Also provides to the original owner, a limited lifetime, lower bearing assembly warranty to the original owner. The warranty provides for the replacement of the entire lower bearing assembly and all of its parts for a cost not to exceed \$89. This warranty covers the parts only, no labor. This warranty is transferable to any new owners for a \$5.00 administration fee. Subsequent owners should send a written request to Mud Buddy, 9358 Springwood Ln. Sandy, Utah 84093.

If a defect occurs during these periods, contact your nearest dealer or Mud Buddy with a dated proof of purchase.

Except for the express warranty of the Mud Buddy set forth above, Mud Buddy grants no other warranties, express or implied, by statute or otherwise, regarding the Mud Buddy backwater motor, its fitness for any other purpose, its quality, its merchantability, or otherwise. The liability of Mud Buddy under the warranty set forth above shall be limited to the amount paid by the customer for the product, less sales tax. In no event shall Mud Buddy Manufacturing be liable for any special, consequential, or other damages for breach of warranty.

#### Thank you for purchasing a Mud Buddy product.

This owner's manual contains the necessary information you will need to unpack, install, operate and maintain your Mud Buddy backwater motor. Safety is key to operating any motorized equipment. Read the warnings in this owner's manual, the caution labels on the engine, and the caution labels on the frame before running your Mud Buddy.

The Mud Buddy is designed for use in shallow water conditions, and with simple care, it should last you many enjoyable years. Engine service centers are located in every major city. If you have difficulty getting engine service, or need frame repair, please contact:

Mud Buddy Manufacturing 7956 S. 1530 W. West Jordan, Utah 84088 www.mudbuddy.com info@mudbuddy.com 1-801-352-8011

# Safety

- Read these safety precautions before operating your Mud Buddy.
- Always attach the safety lanyard to yourself while operating the Mud Buddy. Unclip the safety lanyard from the switch each time you run the engine to ensure it is working properly. The engine should stop immediately when the safety clip is removed from the switch.
- Start the engine with the propeller clear of the water. You must tie down the handle if you intend to run the engine without holding the control handle. Do not leave a running engine unattended.
- The Mud Buddy can be operated from the siting position. If you stand, use a stand-up bar or some other steady-hold to maintain your balance.
- Always wear a Coast Guard approved flotation device.
- Keep body parts and clothing clear of all moving engine components, the universal joint, drive shaft and propeller.
- Do not operate your Mud Buddy by people while they are standing nearby in the water.
- Use extreme caution while operating your Mud Buddy, particularly when it is out of the water and on the boat or on a storage stand. Never clean the engine or frame while the engine is running.
- The engine and muffler can become extremely hot and cause severe burns.
- Do not operate the engine in an enclosed area. Exhaust gases can cause severe injury and death.

## **Assembly**

Your engine is shipped without oil. See the cover for oil type and amount.

Each Mud Buddy is inspected and tested before shipping. If you encounter any physical damage to the crate, or engine assembly, notify the shipper immediately. If you have any questions, call Mud Buddy at (801) 352-8011 and ask to speak with our shipping clerk.

- Remove the sides of the crate to facilitate lifting the engine assembly.
- Mounting requires at least two people or an engine hoist. If you use a hoist, the engine balance point is located directly over the engine drive shaft--place a lift strap around and under the engine crank at this point.
- Stand to the rear of the Mud Buddy. Locate and remove the two 3/8" or 5/16" engine mounting bolts from the right side of the engine and one from left rear. On many models, the right front bolt is used as an engine mount bolt and negative battery cable fastener.
- The handle will be mounted to the underside of the engine mount using

these three engine mounting bolts.

- Cut the shipping wire ties holding the handle assembly to the side of the frame. Rotate the handle to the rear of the engine. Be careful not to kink the wiring and throttle cable. Attach the handle and tighten the three engine mounting bolts.
- Install the engine mounting bracket to the boat: It must be installed so that it is centered and on the outside of the boat.
- Drill holes and insert the two or four 3/8" X 3" bolts from the outside of the boat. Attach the mount using the fender washers and locking nuts on the inside of the boat. Tighten securely, but not so tight that the washers crush the boat surface. Portable 6 and 9 don't have bolts.
- Get a friend to help, or use a hydraulic engine lift to raise the engine.
- Lift and mount the Mud Buddy on the boat. You will be lifting the Mud Buddy from the crate and will then place the swivel bolt located under the engine mount into the top of the mounting plate you just installed on the boat. Guide the mounting bolt gently through the hole. **Keep fingers clear.**
- Install the washer and 3/4" nylon lock nut. Attach the battery cable fastener clip (rubber coated) to the top of transom using the self-tapping screw, just left of mount. This will keep the battery cable from being pinched in the swivel assembly when you rotate the engine around and into the boat for trailering.

# **Rotating Engine Into Boat**

The engine frame is designed so that the tailshaft rotates **counterclockwise** into the boat **and clockwise back out**. If your boat is too high on the corners, you can add one to three 3/4" fender washers between the engine mount swivel and boat mount on the swivel pin. Each washer added will increase the height of the tailshaft by aprox. ½". Again, keep your fingers clear when lowering the engine on the boat mount.

#### Operation/Break-in

**Transporting the Mud Buddy:** When trailering, it is recommended you rotate the tailshaft inside and tie it down securely with a strap. Rubber bungee can also be used, but a good rope or strap should also be used. *The rubber can dry rot, and then easily break.* Place a piece of plywood on the floor to keep the skeg from damaging your boat. On

some boat models, the drive tube will actually ride on the edge of the rear bench seat. Place a piece of carpet or rubber between the seat and drive tube while trailering.

- Prepare the engine for starting: Note: Observe break in precautions. Do not over-rev the engine during the first couple hours.
- Engines are shipped without oil. The engine must be level before checking the oil level. Use a good grade of 10W-30. Do not overfill. If your engine has a remote gas tank, connect the hose. Fill the tank with unleaded fuel with an 87 or higher octane rating.
- If your engine has electric start, connect the cables to a battery that has at least a 250 cranking amp capacity. A garden tractor or marine starting battery is best. Red to positive (+), and black to negative (-). Negative cable also attaches to engine bolt.
- Starting the engine: <u>Read the safety precautions in the front of this owner's manual before starting.</u> <u>Attach the safety lanyard to yourself.</u>
- First, pull out the choke. Ensure everyone is clear of the engine and propeller. Get a good hold of the engine if using the pull start. And, ensure the prop is out of the water and engine is in the level position. A common practice is to attach a rope through one of the struts on the boat and loop an end over the handle to secure the engine. This is useful when launching the boat. <u>Do not leave a running engine unattended.</u>
- On the water: This is where your fun begins. The Mud Buddy is designed to run in almost any water condition, from open water, rocky rivers, to thick vegetation and mud. We want you to enjoy yourself, but ask that you be safe, courteous to others and environmentally sensitive.
- Set throttle to idle. Attach the safety lanyard to yourself before starting. Start the engine with the propeller out of the water.

Caution; never place the propeller in the water at high engine speeds, particularly when the drive shaft is off to the side of the boat. This is true of any outboard motor. The boat can lurch forward, or spin and expel the operator and passengers.

- Operate the Mud Buddy from a sitting position, or standing using a stand-up bar for balance. <u>A stand-up bar kit is available from us that easily installs in minutes.</u>
- With the engine set at idle, lift the handle and place the propeller in the water directly behind the boat. You will now be moving forward.
- Start off slowly and soon you will learn new ways of using the Mud Buddy to propel your boat in and out of places you never dreamed possible.
- Steering the boat is made easy by pushing or pulling the handle. You can also lift and place the propeller in and out of the water as needed to maneuver through vegetation and mud.
- The Mud Buddy is balanced and designed to find its own water level, from idle to full throttle. When operated in smooth, open water, the cavitation plate, located above the propeller will run a few inches below the surface of the water. No upward or downward pressure is needed by the operator on the handle. This feature is built into the drive during manufacturing, however, some boats and loads can affect the manner in which the drive operates. If the propeller dives, or forces it way to the surface and jumps out of the water, a simple adjustment to the cavitation plate can remedy this behavior.

# **Cavitation Plate Adjustment**

The cavitation plate is located above the propeller. First, before you adjust the cavitation plate—do you have the right length Mud Buddy? The standard 68" and 73" model Mud Buddy is designed for boats with transoms less than 17". If you have a 20" or 21" transom, you will need the 85" extra-long model Mud Buddy for high transoms.

Cavitation plate adjustment is done during the manufacturing stage; however some boats run differently, requiring the cavitation plate to be tuned. When properly adjusted, the engine can be run at full throttle and no pressure is needed on the handle, by the operator to keep the propeller in the water. If the propeller jumps out of the water, or dives, then the cavitation plate needs tweaking. It is important to run the boat with a normal load before making this adjustment.

To adjust, see the below photo. Bend the trailing end of the cavitation plate up slightly to make the cav' plate dive deeper into the water, or bend downward to raise. Use a closed 12" or larger crescent wrench. Also use a scrap piece of cloth inside the wrench jaws to protect the finish. Make adjustments a little at a time.



# **Service**

The Mud Buddy drive is unique in that it doesn't require frequent greasing. The drive tube is not completely filled with grease, only to the upper center of the drive shaft. Note the location of the thumbscrew about 18 inches below the universal joint and on the side of the drive tube. This feature allows your Mud Buddy to be serviced less frequently and improves performance, especially in cold weather, when grease in the drive thickens. Do not over-grease the drive since excess grease will be forced out the upper bearing assembly.

Lubrication performed on a regular schedule as depicted below will add years to the life of your Mud Buddy. <u>Over lubrication is the major cause of engine and drive failure.</u>

You will need a hand held grease gun filled with a good quality marinegrade wheel bearing grease. You can find the grease at any major automotive store.

Locate the grease fitting on the lower end of the drive shaft near the upper cavitation plate. Also locate the thumbscrew on the top and center of the drive tube. This is easily removed by hand and is used to check the upper level of grease in the drive assembly.

Annually. The drive tube and lower bearing are lubricated by pumping marine grease into the lower grease fitting until it comes out the thumb screw hole located at the top and middle of the drive tube. If water comes out of the hole, there is a problem with the lower seals—have it serviced soon to preclude damage to the drive unit. Replace the thumbscrew, hand tight. Do not use a wrench or pliers. <u>Do not over grease and overfill the tube.</u>

<u>50-100 hours, or annually.</u> The upper roller bearing is lubricated with the same grease, **two to three pumps maximum, no more.** Excess

grease will ooze out of the bearing. Wipe off excess grease with engine stopped.

**50 hours.** The universal joint rarely needs more than two pumps of a good grade marine wheel bearing grease. Any more will only be slung onto the frame when the engine is started.

**30 hours. The engine swivel** grease fittings are located under the engine mount and on the engine swivel plate tube. They require lubrication two to three times per season.

Engine oil and filter should be replaced according to the engine manufacture's instructions. Change the oil, and filter if equipped, at the end of the season. Acids accumulate in the oil and if not drained, can cause internal pitting if left in the crankcase for extended periods.

The frame is coated with a marine grade powder coating and easily cleaned with soap and water. If you use a high-pressure washer, do not direct the spray at any area containing a seal such as the propeller, upper drive tube, and universal joint or engine drive shaft. The pressure will drive dirt and grime into the seals and cause premature wear.

**Storage:** At the end of the season, and for extended periods of storage beyond one month, the fuel should be run out of the carburetor, and treated with a gas stabilizer. <u>The most common carburetor problems occur because this simple procedure isn't followed.</u>

Also, if you have a remote fuel tank, ensure the vent screw located on the gas cap is open. If closed, pressure can build which causes fuel to be pushed through the carburetor into the crankcase. Over time, this dilutes the oil and can cause engine failure.

# **Propeller Removal**

Replace and/or repair the propeller when it shows signs of damage or excessive wear. Lack of power or reduced thrust in mud is an indication of prop wear. A bent propeller causes vibration that will lead to driveline failure. A common symptom of a bent propeller is excessive vibration within the drive line often heard near the universal joint as a severe rumble.

- Place a large wrench on the nut located behind the propeller. If available, add a long piece of tube or pipe to the wrench for leverage. Use a Mud Buddy prop wrench (see tool list in the back of this manual), to unscrew the propeller.
- You can also make a prop wrench by drilling a  $\frac{3}{4}$ " hole in a 1" X 3' section of flat bar steel.
- Usually, the prop' will be threaded on very tightly and it will require considerable force to unscrew. Do not hit the propeller with a hammer, this never loosens the prop, rather, it causes damage.

#### **Propeller Installation**

Inspect the nuts and washers and replace as needed, using only the Mud Buddy nut set. They are of special design which ensures the prop' runs perfectly straight on the drive shaft.

- Never force a tight fitting propeller on the drive shaft. The shaft is constructed of a very hard steel and the propeller is stainless steel. The two will jam and the propeller will neither go on or off, requiring extensive machine work to remove. Instead, use a wire brush to clean the threads. It may also be necessary to run a 3/4" 10 TPI die-nut over the threads. You may also need to run a 3/4" 10 TPI tap through the propeller to ensure the threads are clear of any burrs. We would rather send you a new prop than have one jammed on the shaft. Call us for help if needed.
- Coat the drive shaft threads with marine grease or never-seize.

- Install the propeller <u>(use gloves, the prop might be sharp)</u> with cupped ends toward you. Install in this order—machined nut, bronze washer, propeller, another bronze washer, jam nut, and finally, the nylon lock nut.

# **Warranty Service**

Your Mud Buddy is designed to last you many years. Warranty items are repaired by authorized Honda, Vanguard, Robin, Kohler, or Kawasaki engine repair centers and the drive/frame by Mud Buddy Service Centers. Parts and tool information and prices are located in the rear of this owner's manual. Tools may be purchased or rented for a reasonable fee, plus shipping. Tools are available, free for your use, to complete service work during the warranty period, and may be rented thereafter. You are important to us, so call whenever you have questions or need assistance. *Prior approval by Mud Buddy is required before completing any warranty work*.

# **Drive Assembly Inspection**

The most common reason for drive failure is a bent propeller. Replace an unbalanced propeller immediately. A common symptom of a bent propeller or blade is grease discharge from the upper drive tube bearing assembly and/or enhanced drive vibration at mid-throttle. If you encounter either, remove the propeller for balancing. While the propeller is removed, run the engine at an idle checking the shaft for straightness. If the shaft is bent, it will be obvious.

If the drive assembly uses more than 20 pumps of grease every 100 hours of operation replace the lower bearing seals. This is easily done by removing the propeller, propeller nuts and lower bearing cap. The cap is left-hand threaded so remove counterclockwise. Replace the seals or return to Mud Buddy for a quick rebuild.

## **Drive Shaft Removal and Overhaul**

**Tools required:** A shaft removal kit is available from Mud Buddy. It includes a propeller wrench, drive shaft and bearing puller, and a roller bearing/seal installation tool set. Other tools you will need include, 3-4 lb. hammer, block of wood, crescent wrench, large screw driver, Allen wrench, and prop nut sockets.

**Parts required:** Lower and upper roller bearing set, lower seal set, and 1 tube of marine waterproof marine grease.

**Procedure:** Either leave the Mud Buddy on your boat, or place it on a solid shop stand containing a 3/4" hole or larger to insert the engine swivel pin.

- Remove propeller and forward jam nut. See "Propeller Removal" for instructions on propeller removal.
- Remove universal joint drive shaft set screws.
- Now remove the two upper drive shaft ball bearing set screws.
- Remove any paint on the surface of the drive shaft between the universal joint and upper roller bearing using medium grit sand paper. A 1" strip of sand paper held with both hands rocked back and forth works best.
- Remove the lower bearing assembly cap. The cap is removed by turning clockwise, since it is left hand threaded.
- Screw the shaft puller on the drive shaft (use the 2" long 3/4" female nut supplied with the puller). Pull the shaft out of the drive tube.
- If you need to remove the bearing, use a two-jaw bearing puller. Place the jaws inside the bearing. Tighten the puller to expand the jaws,

then with a firm pulling action, remove the lower roller bearing. If the bearing won't come out of the bearing housing assembly, try heating the outside of the assembly slightly with a propane torch, but not too much. You can also request a collar puller to remove the entire housing and send it to us for a rebuild. Call us at (801) 352-8011 if you encounter any difficulty with the bearing or its assembly.

- If you need to remove the upper bearing, remove the bearing snap ring. Use the drive shaft, keyway end, as a ram to drive out the upper roller bearing by inserting a piece of rag into the upper bearing assembly with a screwdriver. Then insert the drive shaft into the drive tube, contact the stuffed-in rag, then tap the drive shaft with a wood block or lead hammer. The bearing will pop out.
- The upper bearing assembly, on all models manufactured after Dec, 2000, has a small seal located inside the bearing housing. If it is damaged or worn, remove and replace. Preferably, use a seal removal tool; however you can also use a large flat-tip screwdriver to pop the seal out. Replace with a new seal using a seal driver or socket ensuring the seal is seated evenly. However, you will want to clean out the drive tube first, removing old grease and contaminates. A word of caution; the new seal is easily damaged by the keyway end of the drive shaft when the shaft is installed. As such, sand the keyway end lightly to remove sharp edges. Grease the seal and shaft. Insert the shaft carefully through this upper seal.
- Use the drive shaft and a rag to clean out the drive tube assembly.
   The rag on the drive shaft will not easily pass through the upper collar due to a small shoulder, which is machined into the upper collar assembly. Swab two or three times to ensure all the grease is removed.
- If you have an air hose, here is a little trick that will help. Insert a piece of rag followed by a small piece of plastic bag into the upper end of the drive tube. Then place an air nozzle in the upper end sealed with your hand. Inject air into the tube and the rag will shotgun through the tube, cleaning out grease etc. as it goes.
- The upper bearing is easily installed by using the upper bearing drive tool. First clean out the collar and bearing with solvent. Remove the two bearing set screws and set aside. Place a light film of bearing adhesive, Loctite 609 TM, on the bearing and collar face, being careful not to get the adhesive in the small ring depression around the circumference of the bearing. This is where grease enters the bearing during lubrication. Place the drive shaft through the collar, through the bearing and through the bearing driver tool. The cupped end of the tool should face the bearing. Then use the weight of the driver tool and the inserted drive shaft as a tool to tap/pull the new bearing in place.
- Inspect the drive shaft. Roll it on three pieces of tube or rod on a flat surface and straighten the drive shaft if bent. Check the threaded end of the drive shaft and inspect the area where the seals contact the surface. If excessively worn, replace the shaft and race. If you don't replace a worn shaft, the rough surface will wear the new seals causing premature failure. Check the threads, clean and run a 3/4" die-nut over them if needed. Inspect the keyway end of the shaft and remove any sharp edges.
- Carefully guide the drive shaft through the greased roller bearing and through the upper bearing assembly seal. If it doesn't pass through easily, remove the drive shaft and sand down the end and outer surface around the keyway slot, removing any burrs.
- Place the key on the drive shaft, coat with small amount of adhesive, align with the universal joint and using a hammer and block of wood on the threaded end of the shaft, drive it into the universal joint, aligning the universal setscrew hole with the small indentation in the drive shaft. If you are installing a new drive shaft, note the location of the old shaft within the universal and install exactly the same. This is easily done by

checking the old shaft, which should exhibit marks where it was inserted. Measure carefully because this will affect the location of the lower driveshaft-bearing race inside the lower bearing. The race needs to be located in the center of the lower roller bearing (plus or minus 1/16"). Models released after May 2003 do not have a drive shaft race and no lower bearing alignment is necessary.

- If installing a new drive shaft, drill a 1/16" indentation using a 5/16" drill bit into the drive shaft through the universal set screw hole. Then, drill a 1/8" depression using a (C) size drill in to the drive shaft. The universal set screw will then lock the universal to the drive shaft. Add adhesive to the set screw and insert and tighten the sets screw snugly.
- Now insert the two top roller bearing set screws. Add a small amount of adhesive to the two set screws.
- Place masking tape over the driveshaft threads to prevent seal damage. Grease the masking tape surface to assist cap installation.
- Insert the two lower seals into the cap using the two lower bearing seal tools in this order: The first seal is inserted with the flat surface facing downward.
- The next seal is installed in an opposite manner with the flat surface facing toward you and outward.

# If any of the seals are damaged while installation, remove them and replace with new seals.

- Now screw on the assembly cap. Remember the seal cap is left threaded, so screw on counterclockwise.
- Install the propeller.
- Fill the drive tube with marine grade waterproof grease using the grease fitting located on top of the lower drive tube near the cavitation plate. Fill until grease comes out the thumbscrew check hole located on top and center of the drive tube. Replace the thumbscrew, hand tight, and prepare the engine for running.
- Run the engine at a low speed and carefully inspect the drive shaft for unusual operation. Stop the engine and check the top and bottom roller bearings for overheating. It is common for the lower bearing to become hotter than the top. Thus, do not run the drive out of the water for extended periods of time at high RPM during the first couple hours ensuring the seals break in adequately. Operating it in the water helps cool and lubricate it. You should be able to hold your hand on the upper roller drive for a few seconds without it being excessively hot. If it does get too hot or burns the finish, contact Mud Buddy at (801) 352-8011.

### **Engine Removal/Replacement**

Engine removal or replacement is very simple; however the drive shaft must be checked for alignment when the engine is reinstalled, each and every time. If the engine is being replaced, check the exact location of the universal joint on the engine crankshaft. Note and measure the distance between the engine and universal, and/or end of engine crankshaft and universal. This is important, because the universal must be placed in the same location on the new engine crankshaft.

- Remove the two engine faceplate bolts and four engine base mounting bolts. Remove the battery cable, throttle cable, gas line, and unplug the engine safety kill switch wire.
- Pull the drive shaft out of the universal joint, but not through the top bearing. Don't remove the universal joint from the engine unless it is necessary to replace the engine or repair the universal joint. Remove the engine.

- Install the engine, electrical wires and throttle. Use thread-locking fluid on the two short engine face bolts located on the engine above the crankshaft.
- Reinstall the drive shaft. (see the drive shaft installation instructions.)
- If you install a new engine, you will need to install the universal joint in the exact same location. Measure the forward position of the universal joint on the old engine and mark the new crankshaft. Reinstall the universal in the same location.
- Drill a 1/16" depression into the engine crankshaft through the universal set screw hole, with 5/16" drill bit. Then drill a 1/8" deep depression in the center of this pilot hole with a (C) size drill bit. Insert and tighten a dog point set screw. Coat with a small amount of thread adhesive. Note: Honda engines have a case-hardened crankshaft and you will need to mark the depression location using a marking pen through the setscrew hole. Or, tighten and loosen the universal set screw several times, which leaves a mark on the hardened crankshaft. Then, remove the universal from the crankshaft and grind a small 1/8" depression into the crankshaft for the setscrew using an abrasive wheel mounted on a drill or die-grinder.
- Test run the engine. Feel the top and bottom roller bearing to see if they become excessively hot. The bottom bearing assembly runs warmer than the top bearing assembly.
- The process of removing propeller, drive shaft, universal and even the engine, although seemingly complicated, are easy tasks. Take your time, follow the instructions in this manual, and use good common sense about use of tools, cleanliness and safety. After the first time, you will be able to easily maintain and replace the Mud Buddy drive as needed. Remember, call us, or see your local dealer if you need help. We will be happy to walk you through the process. (801) 352-8011
- Good luck and good fun.

#### **Mud Buddy Tools**

Common tools are used to repair the Mud Buddy drive. They can be rented from Mud Buddy if needed. They are free to use for warranty work

# **Mud Buddy Parts**

Universal Joint (Complete) 78.00 Universal Joint Rebuild Kit 12.00

