

24/7 ON CALL™

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24/7 ON CALL™

We are coming to the end of our first year publishing *On Call 24/7*. It's a time for reflection as we prepare for the American Towman Show in Baltimore where we first introduced the magazine a year ago - and what a year it has been. Having attended fourteen different shows across the country along with many training classes and NASCAR races, I have visited with so many of you and was humbled by your kind words and thoughts about the magazine. Your encouragement inspires us and gives us direction to provide you with a quality publication that is entertaining, educational and worth taking time from your busy schedules to read. As we draw this year to a close, I am already looking ahead to the start of a new year with opportunities to visit many old and new friends starting with The Florida Tow Show in May. I am also excited about the "Towfest" being held in early September that will be hosted by the International Towing Hall of Fame and Museum in conjunction with many state associations. The unveiling of the Wall of the Fallen, giving recognition to those who so richly deserve it, will be one of many activities that will make this event something you won't want to miss, along with drawing towers from around the world to our hometown, Chattanooga. Lastly, let's not forget the members of our extended towing family along with the rest of the people who faced devastation from hurricanes Katrina, Rita and Wilma keeping them in our thoughts and prayers. What a great opportunity to remember how truly blessed we are to be part of such a great and close-knit industry.

Wishing you all a safe and happy holiday season.



Randy Olson, Editor
On Call 24/7

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On The Cover

On September 21 and 22, over 70 professional recovery operators from throughout the northeast region assembled at the Rotator Towing Seminar held at the Connecticut Fire Academy in Berlin, Conn. The seminar, sponsored by Miller Industries, included discussions on equipment engineering and design, maintenance, rigging and safety and included live demonstrations. Pictured are some of the proud participants



who attended the seminar along with their Century and Challenger rotators. Miller Industries strongly believes in the importance of these educational seminars, which provide an opportunity for Miller personnel to interact with recovery operators and get a better understanding of their needs when using rotators and other Miller Industries equipment. As you'll see in some of this issue's articles, we then take the information our customers supply and pass it along to our engineering department for consideration in future equipment designs. Thanks to the seminar participants for their hospitality.

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Inside View

Proud To Know You

As a member of the largest manufacturer of towing and recovery equipment in the world, I am extremely proud of the fact that our people and distribution diligently work at having a positive effect on the industry they serve.

From a product standpoint, both our company personnel and our distributors understand the complexity of the towing and recovery issues you regularly face while performing your jobs. Through that understanding, our engineering staff undertakes the challenge of developing solutions corresponding to your needs. Our team spends countless hours with operators of towing and recovery equipment in the field, at trade shows and training seminars to understand product usage in the marketplace. We learn from listening and react to improve safety, convenience and product performance.

My pride in the Miller Industries extended family of employees and distributors doesn't just come from the great products we build. It comes more from the personal relationships we have developed over the years within the industry. I believe these relationships have created who we are today.

We are not your typical manufacturer/distributor network in a vocational business. The industry is in our blood. Our people, like you, live and breathe towing and recovery 24 hours a day. We enjoy the interaction we have with our customers. We realize most solutions regarding product innovation come from you. As evidence of that, I point to our past product developments that revolve around making your job safer and hopefully easier. We listen!

Our family is passionate about the industry we serve — an industry that does not normally receive the credit or recognition it justly deserves for all its positive contributions to the motoring public. Our hope is that you recognize how we - like you - have the industry flowing through our veins and together we can work to build a better industry for the future.



*By Jeff Badgley
President and Co-CEO*

24/7 ON CALL



Randy Olson, Editor
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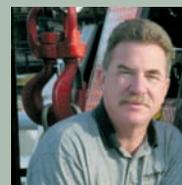
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*Nylon Wear Pads:
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Not to Grease?*
Page 25



Your next purchase could be a purchase toward their future.

You're buying equipment to build your company but you're building your company for their future. Whether it's your kids, grandkids, stepchildren, brothers, sisters or employees, the decisions you make today will affect their tomorrow.

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Simple Hookup Engineering Decreases Weight and Overhang

*By Tom Luciano
District Sales Manager*

Weight has become a critical issue in heavy-duty towing since load weights on the roadways are being more strictly enforced. At Miller Industries, we strive to put as much weight forward on your chassis to achieve the maximum payload of your unit. We do this through the use of fabricated parts, high-yield steel, and design.

A critical component to help you avoid problems at the scales is how and where you attach to the vehicle in tow. A tow truck is unlike other applications such as vans, dump trucks or stake beds. As most trucks are loaded, the weight of the load is transferred to the truck's front and rear axles. In the case of tow trucks, the load is lifted behind the rear axle, so the front axle becomes lighter. The weight that comes off the front axle is transferred to the rear axle, along with the weight of the load.

A tow truck is an example of a Class 1 lever, or simply put, your tow truck is

like a teeter-totter. If you add more weight to one side, or if you move the weight further away from the pivot or fulcrum point, the other side will go up. The basic principles of loading your tow truck are simple: the distance from the pivot or fulcrum point is the center of the trunnion on a tandem axle. The front of your tow truck acts as one end of a lever (this is why the wheelbase and front axle weight are critical to maximize the towing capacity.) On the opposite side of the pivot point is the underlift and the vehicle you are going to tow. The further you extend the underlift, or the heavier the load you place on it, the more the front of your tow truck will lift and reduce your front axle weight.

The second point we need to think about when considering where to attach is the load itself. The vehicle we are going to tow is a Class 2 lever, or simply put, comparable to a wheelbarrow. If you have a heavy load of dirt in a wheelbarrow, the further back on the handles you lift, the less effort that is required because you are not lifting as

much weight. The casualty you tow acts in the same manner. The closer to the end of the vehicle you lift, the less weight you are lifting. With these two principles of leverage in mind, we can demonstrate how they can affect the weights on your tow truck.

Eye-Opening Demonstrations

Tom Brennan from T & T of New York located in Cohoes, supplied the tow truck for our first demonstration. The tow truck was a 2000 Mack equipped with a stainless steel Vulcan NV-50. It had a 275" wheelbase and weighed 11,140 lbs. on the front axle and 21,380 lbs. on the rear axle. The truck that we hooked up to was a 1996 Kenworth T800 with a CAT 3406, 10-speed transmission and 218" wheelbase. The weight on the front axle was 10,240 lbs. and the weight on the rear axle was 7,780 lbs. We took these two vehicles to a local scale to show how we could use the principles of leverage to our advantage when hooking up.

For the first pick up, we performed one of the most common hookups in underlift towing. We used a set of 3", short forks and picked up the Kenworth between the U-bolts on the front steer axle. To calculate how close to retract the underlift, we measured from the center of the Kenworth grill to the farthest outer part of the truck and divided by two. This equation gives you the closest distance you should have between the bumper of the tractor and the rear of your tow truck in order to maintain clearance for turning. Our measurement on the Kenworth was 48", so we divided by two and arrived at 24" for the minimum clearance. With the 24" gap between the back of the tow truck and the KW bumper, the overhang from the center of the trunnion on the tow truck to the lift point was 138". We drove the unit onto the scales and the front axle now weighed 6,620 lbs. and the rear axle weighed 35,620 lbs.



Lifting the truck at the steer axle using a set of 3-inch, short lift forks is one of the most common hookups used today.

See Simple Hookup Engineering on Page 8



The overhang is measured from the trunnion (center point between the two axles) to the lift point on our towed vehicle, which in this hookup is the front axle.

For our second demonstration, we removed the 3" lift forks and opted for a set of pivoting spring hanger adaptors. By lifting at the front spring hangers rather than at the axle, we were able to fully retract our underlift. This gave us a distance of 30 1/2" between the Kenworth bumper and the rear of our tow truck, and provided us with over 6" of additional clearance between our towed vehicle compared to our first lift. The overhang, the distance from the tow truck's trunnion to the lift point, was reduced to 116", which was 22" less than the overhang measurement in our first hook up. When we drove the tow truck onto the scales, the front axle weight had increased 1,060 lbs. to 7,680 lbs. and the rear axle decreased 1,920 lbs. to 33,700 lbs.

So how did we dramatically change our axle weights? The answer is by making both the tow truck, a Class 1 lever, and the towed vehicle, a Class 2 lever, work to our advantage. By lifting at the front spring hanger of the tow truck (remember the teeter-totter) we decreased the length of the lever (the underlift's extension). This helped maintain more weight on the other side of the fulcrum, (the front axle of the tow truck) and did not transfer that extra weight to the tow truck's rear axle. We gained an advantage on the towed vehicle by lifting further back (similar to extending the handles on our wheelbarrow). Simply put, by lifting further out we are lifting less weight on the casualty and we are reducing the overhang on the underlift, which takes less weight off of the front axle and transfers it to the rear axle. By using these two principles to our advantage, we reduced the rear axle weight over 1,900 lbs. with the same vehicle hooked up to the same tow truck.

Fork Receivers Make a Difference

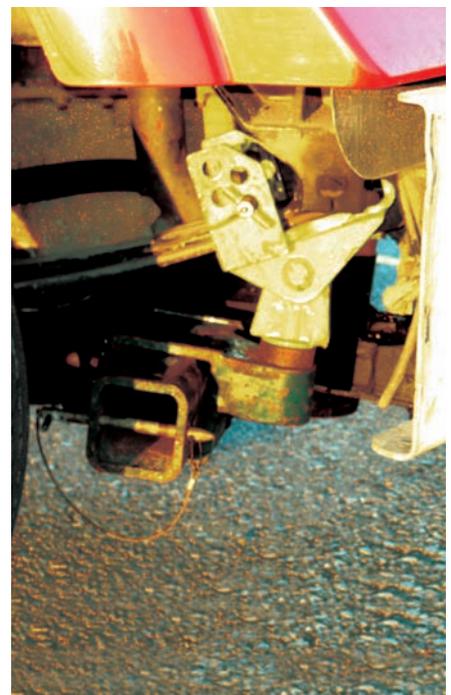
One of the unique features of the cast fork receivers used on all Miller heavy-duty underlifts is how they can



By lifting this truck using a set of pivoting spring hanger adaptors, we were able to benefit from the combination of moving our pick point on the towed vehicle toward the front of the truck, and by further retracting the underlift, reducing the overhang on our tow truck by 22" (which increased the front axle weight while decreasing the rear axle weight by over 1,900 lbs.).

be used in a number of different positions depending on your load. To further reduce the overhang on the tow truck, we reversed the fork holders on the crossbar so the pivoting spring hanger adaptors are now at the front of the crossbar instead of the rear. By doing this simple switch, we reduced the overhang on the tow truck an additional 10", dropped the rear axle weight to 32,800 lbs., and increased the front axle weight to 8,360 lbs. By altering the overhang on the tow truck, without doing anything different on the towed vehicle, we have reduced the weight another 900 lbs. In this example between our two spring hanger hook-ups, we are reducing the rear axle weight by 90 lbs. for each inch we reduce the overhang on the underlift.

To roll through the scales with your maximum front axle and minimum rear axle weights, pick up your disabled vehicle at the farthest point out. You can usually retract your underlift in closer to reduce the amount of overhang behind your tow truck, and you also reduce the amount of weight you're lifting. **24/7**



By reversing the fork holders on the crossbar, the overhang on the tow truck was reduced an additional 10 inches. The rear axle weight further decreased at a rate of about 90 lbs. for every inch of overhang we eliminated.

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The Proof's In the Performance

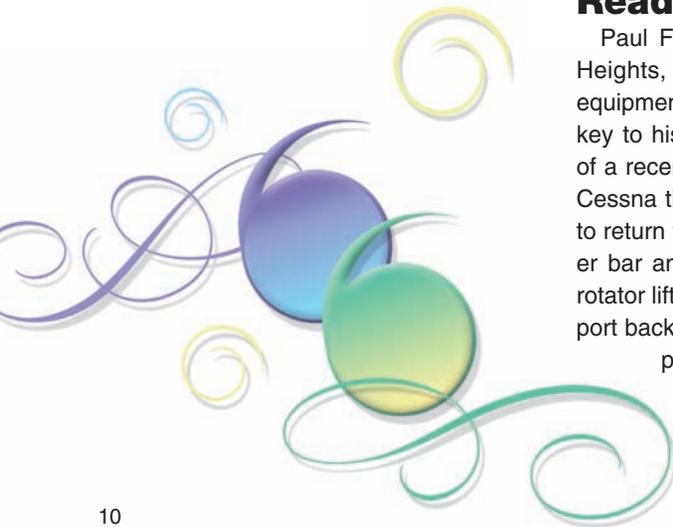


Always Eager to be First

Jamie and Jason Davis of Aggressive Auto Towing Ltd. in Abbotsford, a province in southwestern Canada, are all smiles standing beside the newest addition to their fleet. Their new Challenger rotator mounted on a Peterbilt 378 with powerful 60,000-lb. winches and a pair of 35,000-lb. drag winches was the first Challenger rotator to be equipped with a three-stage recovery boom! Jamie and Jason also opted for a wireless proportional remote control, Tomar lighting package and a custom three-color metallic paint job to make their 2005 custom Challenger rotator something to brag about. Their Challenger rotator will feel right at home alongside the brothers' ten other Miller heavy-duty wreckers. Jamie and Jason agree that their Challenger rotator was built to perform. The only thing they could not agree on was who would be the first to drive from the Northwest Regional Tow Show in Vancouver, Washington, where they took delivery.

Ready, Willing and Able

Paul Fries of Fries Automotive in Prospect Heights, Illinois, believes having the right equipment and knowledgeable operators are key to his success. Paul shared some photos of a recent mishap that involved a twin engine Cessna that lost an engine and crashed trying to return to the airport. Using a special spreader bar and lifting straps, Paul's Century 1060 rotator lifted the airplane onto a trailer for transport back to the airport. Paul is thrilled with the performance and versatility his Century rotator provides. From the toughest winch job to a delicate plane recovery, his Century 1060 flies high.





Easy As 1 - 2 - 3

Wood's Service Center in Roanoke, Virginia, has had plenty of opportunities to test their new Century 9055 with a three-stage recovery boom mounted on a Peterbilt. According to Allen Wood, vice president of Towing and Recovery Service and third generation in the family towing business, one of the first calls they received was to transport a MAN chassis with a custom-made Tread blasting body that stood 13' 6" tall. Allen said their new rig performed the tow effortlessly and he knew they had made the right equipment choice. In another call, a loaded tanker needed the tractor swapped out and the landing gear could not be trusted. Recovery straps were placed around the belly to support the front of the tanker, and the height of the three-stage boom made the job a breeze. In the short time they've had the unit, Allen said the power and versatility of the Century 9055 has handled any situation they have called upon it to perform, including doing a lift on a Bomag Roller that partially came off a tractor-trailer that had gone 30 feet off the road, and lifting a truck that was pulling a goose neck trailer over a guardrail. According to Allen, "The reach of the three-stage boom has been a great asset for these recoveries. We couldn't be any more satisfied."



Handling the Call

After reading the article, "Rotators Where We've Been and Where We're Going" in issue 3 of *On Call 24/7*, Kevin Farthing, owner of WAFFCO Towing in Lake Station, Indiana, sent in a picture of his Century 1060 rotator in action. WAFFCO was called upon to tow in a snorkel fire truck that weighed 23,500 lbs. on the front axle. Kevin said that by retracting the bucket over the deck of his Century 1060 rotator and having the boom forward to keep weight on the front axle, his truck handled the load without any difficulty. The fire truck was quickly on its way to a local shop for repairs. **24/7**



Industry News

Celebrating 10 Years — New York Style



Miller Industries recently celebrated its 10th anniversary of listing on the New York Stock Exchange (NYSE). In honor of this milestone, Miller Industries executives and board members, including Chairman and Co-CEO Bill Miller along with President and Co-CEO Jeff Badgley, were invited to ring The Closing BellSM on August 25, 2005. The ringing of the bell signifies the end of a trading session on the NYSE and is an honor for any company. "Being invited to ring the bell for our tenth anniversary on the NYSE means a lot to us here at Miller Industries. Our duration on the NYSE is an accomplishment companies strive for and is proof of our strength and stability," said Jeff Badgley.

IN SUPPORT OF HURRICANE KATRINA VICTIMS

Miller Industries employees and associated foundations donated over \$30,000 to the American Red Cross, churches, other related funds and individuals for the benefit of the victims of Hurricane Katrina.

Jeff Badgley, President and Co-Chief Executive Officer, stated, "We are proud of the generosity our employees have shown in this time of great need in the Gulf Coast region.

We have so many friends who have lost so much at the hands of Katrina. Our thoughts and prayers go out to all of those who have suffered losses. We will continue to look for opportunities to help over the coming weeks and months."

Some employees have donated time in the hardest-hit regions, including making many trips to the Gulf Coast to work on the relief effort, caring for and actually housing evacuees, holding fundraisers (including a motorcycle rally organized by the Ooltewah plant's employees) and arranging for delivery of needed items to the coast.



Commitment to Training

Over 25 towing and recovery sales professionals representing Miller Industries distributors from across the country met in Chattanooga for several days of intensive training led by Miller Industries training instructor Tom Luciano. The sessions covered light-duty, carrier and chassis product knowledge and specifications. Miller Industries is committed to continuing educational programs and seminars for its distributors and professional towers to assist in making the proper equipment choices to meet their specific needs.

New Employees Join the Miller Engineering Team



Mark Dyer

Miller Industries Inc. is proud to announce the addition of two new members to the Engineering Department.

Mark Dyer joins Miller Industries as an Application Engineer, Heavy Wrecker Platform. Joining us from Peterbilt, Mark brings over a decade of automotive-related manufacturing experience to Miller Industries. While at Peterbilt, Mark worked his way up from an Applications Engineer to a Senior Applications Engineer, responsible for maintaining the Electronic Engine Database for all Peterbilt plants. Mark received both his B.S. and M.S. in Mechanical Engineering from Auburn University, and is a Registered Professional Engineer with the Tennessee State Board.

Blake Pruett

Mark currently resides in LaVergne, TN with his wife and two sons.

Blake Pruett joins Miller Industries as a Design Engineer. A native of Cleveland, TN, Blake most recently worked as a Research Engineer for the Chattanooga Group. He brings vast engineering experience to Miller, holding several patents in mechanical devices used in the medical field. Blake is a graduate of the University of Tennessee at Chattanooga and is management certified. He currently resides in Cleveland, TN.

24/7



Rush Truck Center of Nashville is the proud supplier of Peterbilt trucks to Miller Industries, "The World's Largest Manufacturer of Towing & Recovery Equipment." Contact your local Miller Industries Distributor to find out why Peterbilt is the number one choice of professional towers for their heavy duty chassis needs.



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Miller Industries stocks a wide variety of Peterbilt and Kenworth Class 8 chassis in tandem and tri-axle configurations along with sleeper and standard cabs that have the proper specifications for heavy towing and recovery applications.

Build It to Spec

*By Vince Tiano
Director of Chassis and Trailer Division*

As the leaders in heavy-duty towing and recovery equipment manufacturing, it is important to us that you make the right decisions when purchasing a chassis for your heavy-duty needs. A heavy-duty tow truck is a complex, expensive, highly-specialized piece of equipment purchased with the expectation that it will be in service a number of years. The wrong decisions when spec'ing your truck can cost you time and money, and prevent your towing and recovery equipment from operating at its maximum capabilities.

Unlike a passenger vehicle or light truck that is ordered as a more complete package, heavy-duty trucks are built from the ground up with over 17,000 individual components. With so many applications in heavy truck chassis, what works for a dump truck, garbage packer or road tractor does not necessarily make a good towing and recovery unit.

Even the most experienced truck salesperson who may have sold thousands of trucks during his career can have limited knowledge about towing applications. After seeing trucks that did not properly match the equipment and the costly relocation of components for body installation, some of the Miller staff worked closely with the chassis engineers and manufacturers to develop a chassis specification that best suits our industry's needs. Then we committed to you, our customer, that we would stock a large variety of these chassis to fit your individual needs.

In this article, we will cover some of the factors you should consider when making your chassis decision.

Frame Facts

The frame is one of the most critical components in the chassis' construction. To ensure the Resisting Bending Moment (RBM) is correct for the application, we use two configurations on our stock trucks built specifically for durability

throughout the lifecycle. We use a 10 3/4" x 3/8" (120,000 psi) mainframe rail with a full steel insert for our 35- to 50-ton heavy-duty units. This configuration gives the frame rail an RBM rating of 3,280,000 lbs. per side. On all of the heavy-duty units over 50 tons, we use an 11 5/8" x 3/8" (120,000 psi) mainframe rail with a full steel insert. This configuration gives the frame rail an RBM rating of 4,735,000 lbs. per side.

Tool compartments on heavy-duty tow trucks mount to the side and over the top of the frame rails, so a "clean" outside frame from the back of the cab rearward is also crucial. After-the-fact modifications of moving battery boxes, air tanks or cutting down fuel tanks can be very time consuming and costly and lead to additional holes having to be drilled in the frame.

In addition, Miller Industries orders air and electrical lines and hook ups at the rear of the chassis from the manufacturer, which means less chance of air leaks or maintenance problems over the life of

your vehicle rather than splicing into or extending hoses and wiring.

We also order aluminum hubs, wheels and fuel tanks on all of our stock Class 8 chassis. Using these lighter weight components saves weight, which increases your tow truck's payload without affecting the structural integrity of the chassis.

Over, Under, In and Out

The front axle, rear axle and suspension are also important factors we consider when engineering your truck. The average over-the-road tractor has a 12,000-lb. front axle, 40,000-lb. rear axle and 40,000-lb. suspension. Axle capacity varies based on the recovery boom and underlift specifications. Typically, on 35- to 50-ton units, the chassis will be spec'ed with a 14,600-lb. front axle, a 40,000-lb. rear axle and a 46,000-lb. suspension. On heavy-duty units over 50 tons, we spec a 20,000-lb. front axle, 46,000-lb. rear axle and 46,000-lb. suspension. The above axle and suspension configurations allow

the proper front and rear axle weight distribution to maximize the lifting potential of the heavy-duty unit.

We also consider the engine and transmission when spec'ing your truck. Engines need enough horsepower and torque to start and move heavy loads. Transmissions need the correct low ratio to start moving the load and a high enough ratio for traveling at higher speeds to maximize fuel economy. We use a 475 hp engine with an 18-speed transmission on most of our Class 8 chassis for heavy-duty applications. We also ensure the transmission has an accessible PTO opening along with adequate clearance for a large direct-mount hydraulic pump.

In addition to power train components, driver comfort, convenience and safety is also important to keep your driver alert and to help retain qualified operators. We don't scrimp when it comes to the comfort inside the cab. Premium interiors, driver and passenger air ride seats, power windows, tilt wheel, power mirrors, AM/FM, CD premium sound system and

a full gauge package are all included in our stock Class 8 chassis to make your driver feel right at home in his new truck. For your convenience, Miller Industries stock Class 8 chassis are pre-wired for a remote throttle hook up at the rear control station that allows you to increase your RPMs without having to go back and forth from the cab to the rear of your truck. In addition, we order a winch brake on all of our stock Class 8 chassis. The winch brake is a safety feature that adds parking brake chambers to the front axle, allowing the operator to "lock down" the front axle as well as the rear axle brakes during those tough recovery jobs.

Choosing the correct combination of chassis and equipment when ordering a heavy-duty towing and recovery unit can save you money along with maintaining better resale value down the road. These are just a few examples of how Miller Industries' staff and distributors ensure you receive the best engineered, best built heavy-duty tow truck money can buy. When you're ready, call the experts. **24/7**



The chassis are ordered with the correct frame lengths and RBM rating so frame stretching or additional reinforcement is not necessary. Outside frame rails behind the cab are clear of air and fuel tanks, and air and electrical hook-ups are located at the rear of the frame.



**An overturned tanker is blocking traffic.
Traffic is backed up for miles.**

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Your company got the call because the police count on you to get a big job handled quickly, efficiently and professionally. You and your team have worked hard to earn that reputation. Your Century helped you get there.

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Function and Performance: The Challenger XLT Series

The Challenger's long boom design provides for increased front axle weight while towing as well as additional extended boom reach for those tough recoveries.

*By John Hawkins III
Vice President of Sales, Heavy-Duty Products*

In today's real estate market, "location, location, location" is a phrase used to add value to your purchase. In the towing and recovery industry, the value lies within function and performance. The Extra Long Travel series (XLT) was introduced to the towing industry two years ago and is a prime example of Miller Industries recovery equipment that embodies both function and performance.

XLT units are being used worldwide in some of the most demanding situa-

tions where function and performance are crucial. These units are currently supporting our troops in the Middle East, working the narrow back roads of Europe, challenging the climatic weather changes in Canada, working the sugar sands of South Florida, handling the mountains of the Appalachians, and working the rugged outback of Australia.

The XLT series design is what enables it to be used in such diverse areas. The design utilizes the proven, long-conventional recovery booms of the Challenger product line, which have

side-mounted elevation cylinders. Having the cylinders on the side allows the boom to travel further to the tailboard of the unit with no underlift interference. The single inner extension boom allows for a larger and more powerful extension cylinder than some of the three-stage models offered in the market today. With this two-stage design, you can extend and retract heavier suspended loads.

With the mast of the recovery unit traveled at the rear and the boom fully extended, the working distance we achieve compares with many three-stage booms at two degrees. It is in this position that the XLT clearly surpasses any other similar model on the market.

At Miller Industries, the underlifts on our recovery units are designed as an integral part of the total unit, not an afterthought. Since the underlift is an independent operational component of the towing and recovery unit, you can travel the XLT forward and backward with the underlift in the normal stowed position, and not have interference between the two. This can be done from "two" degrees to full elevation with the underlift on the unit. It is important to



Challenger's independent boom and underlift allows for the boom to travel back and forth without interference from the underlift at any boom elevation.

note that with the competition's underlift pinned in position on the tailboard of the wrecker, their boom cannot be lowered past approximately 40 degrees without the elevation cylinder getting into the underlift when the boom is slid to the back of the unit.

Super Standard Features

The XLT series is available in two models, the newly-redesigned 6807 with a 40-ton rating and dual 35,000 lb., 2-speed DP winches, and the 8807 with a 50-ton rating and dual 50,000 lb., 2-

speed DP winches. Both of these models have 156" of extension in their recovery booms and travel 72" from their normal stowed position back toward the tailboard.

Other standard features include 180" C.B. modular aluminum body with longer C.B. s available. These aluminum compartments are lighter in weight and offer years of better appearance and superior corrosion protection over carbon steel. Diagonal multi-position recovery jacks found on Miller Industries heavy-duty models offer greater side and rear recovery stability on a variety of surfaces. The XLT series also comes equipped with dual control stations for driver safety and convenience along

See Function on Page 20

Underlift Questions

Conventional stick boom wreckers are still in the market place today because of one thing and one thing only: the reputation they have for greater recovery capability. Time after time you will hear this. Now whether that statement is right or wrong, consider this: Why would you design a unit primarily for recovery and limit its capabilities by hanging an underlift off the recovery boom? So you redesign the recovery unit to where the underlift can be removed so that it does not interfere with the recovery. Okay, that's supposed to be convenient, but where do you put it? Above the recovery? Or below? To the left or to the right? How long does it take to remove it, or did I forget to remove it? Or, in the middle of the recovery, did the recovery scene change? And what do you do once you're finished with the recovery and you have to tow the casualty away? Oops, I have to go get hooked up to my underlift. In today's arena with law enforcement and incident management watching everything we do — and wanting the scene cleared quickly and safely — none of the above sounds convenient to me.



The Challenger XLT Series two-stage boom extends 156" for more power and capacity. The boom can travel 72" backward or forward with a suspended load at 60 percent of its rated capacity.

with deck storage to carry lumber and other recovery items. D rings are located at the sheave heads, the end of the first stage boom, and on the tailboard. These rings offer a diverse number of tie back opportunities.

Another standard feature of this two-stage unit is its impressive capacity rating retracted or extended, whether in a forward or rear position. A common question with regard to the XLT is whether you can travel the boom forward or backward with the load suspended, and the answer is yes. The unit is designed with the ability to move 60 percent of the rated load.

Function, Function, Function

At Miller, we listen to your needs and requirements, and incorporate that information into our units' designs. With the XLT series you can easily see that when it comes to a conventional boom wrecker design, with a boom that can travel back and forth under load, in function, features, design and in performance, we excel.

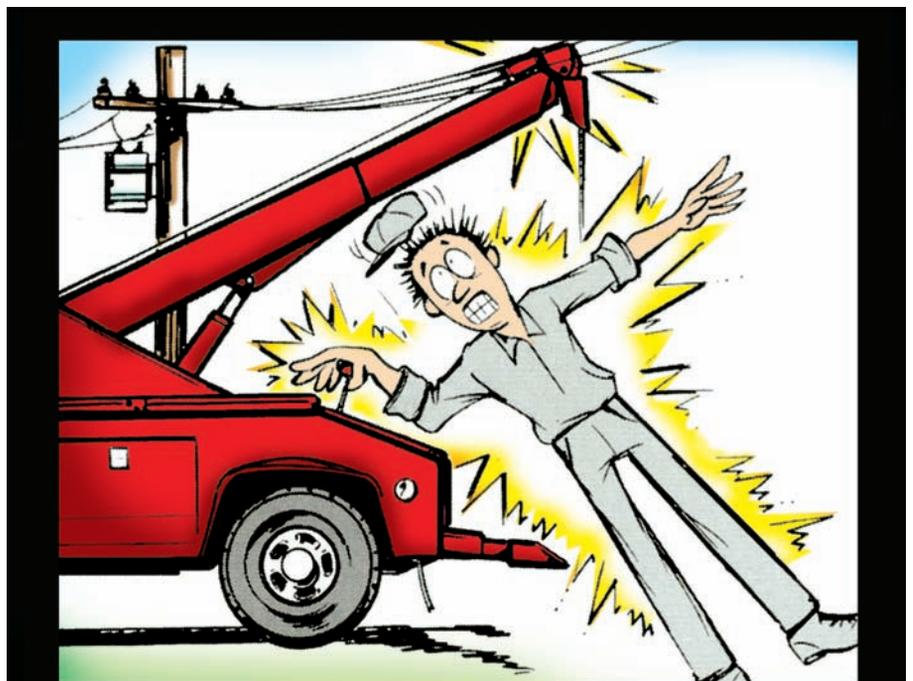
If you are in the market for one of these models, please take the time to contact your local dealer for current literature or to request an operational DVD. We pride ourselves on the decades of knowledge our distributors and factory representatives can offer you. So give us a call, we can help. **24/7**



Removing and reinstalling the underlift on some competitive units to fully utilize the boom reach takes valuable time at the recovery scene, along with posing the problem of "Where do you position it out of the way?"



On some competitive units in the market, if the boom is slid rearward, the boom cannot be lowered with the underlift installed or damage to the boom lift cylinders can result.



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IN HONOR

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Honor has been the reward for what he gave.*

- Calvin Coolidge (1872-1933)



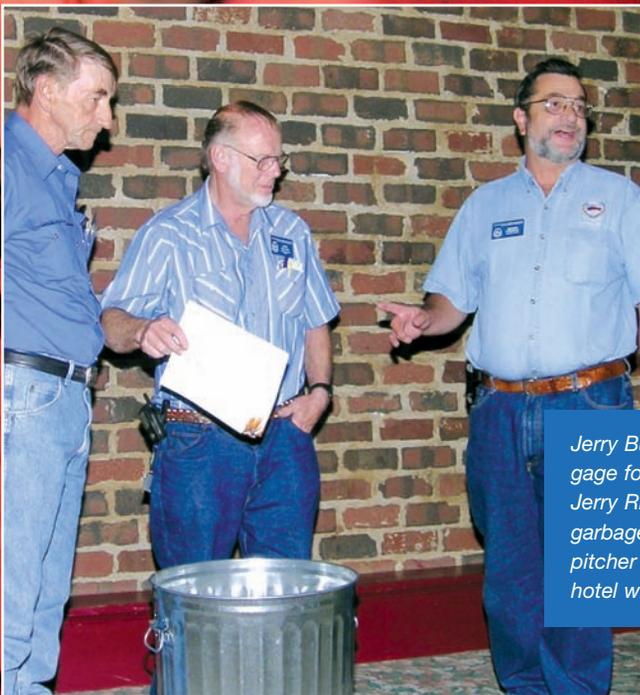
On Saturday, October 8, 2005, the International Towing and Recovery Hall of Fame and Museum (ITRHFH) honored industry leaders at the Hall of Fame Induction Ceremony. Five industry professionals were inducted as the Class of 2005, joining the ranks of industry greats who have made significant contributions to their communities and industry, often at great personal sacrifice.

That same weekend, museum members gathered for their annual meeting and were surprised to learn that, through the generosity of The Miller Family Foundation, the museum no longer has a mortgage.

"There is no greater honor than knowing a gentleman like Bill Miller," says George Connolly, ITRHFH president. "Because of his Foundation, the museum has the ability to grow and become the centerpiece for our industry today and into many tomorrows."

But more was yet to come as The Miller Family Foundation also donated the first of several payments towards the Wall of the Fallen Fund. This fund will pay for the development and creation of a wall to honor towing operators killed in the line of duty.

"Again we graciously thank The Miller Family Foundation for kick-starting the museum's next phase with the development of the Wall," Connolly says. "This tribute to our industry's heroes has long been overdue and will be a memorial children and grandchildren will proudly visit." **24/7**



Jerry Bullock, chairman of the ITRHFH Board of Trustees (center), burns the mortgage for the International Towing and Recovery Hall of Fame and Museum building. Jerry Riggs, an active museum member from Athens, Tenn. (left), is ready with the garbage can lid, while George Connolly, ITRHFH president (right), stands by with a pitcher of water so they don't inadvertently burn down the Chattanooga Choo Choo hotel where the meeting was held.



There is no greater professional honor for an individual than being recognized by your peers. The Hall of Fame Class of 2005 pictured from left to right: Barbara L. Tomlinson, Ashland, Wis.; Bruce Schneider, Portland, Ore.; Al Gregg, Brookings, S.D.; Kenneth G. Cruse, Niagara Falls, Ontario, Canada; and Darrel E. Carmichael, Richmond, Mo.

From left to right: Steven Brown, architect from TWH Architects Inc., Cessna Decosimo, artist, and Bill Miller present the managing trustees of the ITRHFM with designs and the model for the Wall of the Fallen memorial, which will be built at the museum site to honor towing professionals who have lost their lives. The project will be unveiled in conjunction with next year's Hall of Fame Induction Ceremony and Tow Fest, which will be held in Chattanooga in early September.



During the weekend Hall of Fame ceremony and festivities, Miller Industries hosted factory tours for many groups of professional towers from across the country and Canada. Jeff Badgley and Will Miller are pictured with a group of professional towers from Wisconsin who took the opportunity to see how the finest quality towing and recovery equipment is manufactured. Front Row: Guy Richard, Guy's Truck and Tractor Service. Middle Row: Steve Davis, Davis Citgo Service; Jeff Roskopf, Roskopf's Service and Towing; Jeff Badgley, Miller Industries President and Co-CEO; and Ken Weber, Ken Weber Truck Service. Back Row: Rick Leonard, Floyd & Sons Inc.; Greg Gessler, Gessler Auto; and Will Miller, Miller Industries Light-Duty Equipment General Manager.



Will (left) and Bill Miller (center) present George Connolly (right) with a check from the Miller Family Foundation for the first installment to begin work on the Wall of the Fallen memorial that will be constructed at the museum. The memorial is designed to honor the great heroes of the towing and recovery industry who have made the ultimate sacrifice while assisting the motoring public, and to help raise public awareness of the dangers professional towers face in their duties.

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Nylon Wear Pads:

To Grease or Not to Grease?

By Ron Nespor

Director of Engineering for Carrier Operations

Recently, there has been a great deal of debate within the towing industry about lubricating wear pads. Some equipment manufacturers recommend lubricating wear pads with grease, while other equipment manufacturers claim it isn't necessary. Who is a customer supposed to believe? To answer this question, we need to examine the facts, including what the manufacturers of nylon wear pads say about their products.

Nylon-based plastics are the preferred choice for general purpose wear applications because they are very tough, they have a low coefficient of friction and they have good abrasion resistance. Nylon-based plastics are also made in different grades that are designed to achieve certain performance characteristics. Proven applications for nylon-based plastics are bearings, rollers, wheels, wear pads and gears.

The manufacturers of nylon-based wear pads promote the material as a means to reduce galling and provide lubrication. According to these manufacturers, in many cases the use of grease or oil is not necessary with these wear pads since the material contains a lubricant additive and are self-lubricating. However, these same manufacturers say that grease or oil can be used if so desired. This is where the confusion about wear pads begins in the towing industry. Should the wear pads be greased or not?

At Miller Industries, we have pursued this question time and again with every plastic supplier soliciting Miller's business. The plastic suppliers promote their products as not needing lubrication because it sounds better, it is neater and it is convenient to eliminate the task of lubrication. Promoting plastic products as "greaseless" is simply a marketing pitch. The truth about lubricating

pads is apparent when representatives of these plastic companies admit that the use of grease or oil will lower the coefficient of friction on the wear pads, which will make them slide easier and last longer. When coefficient of friction is rated as it refers to the ability of steel to slide on the pad, the lower the number, the easier the steel will slide. At Miller Industries, the material we use has one of the lowest coefficient numbers available, but we recommend grease for the same reason the plastic manufacturers find that grease lowers the coefficient of friction; grease and oil make wear pads more slippery.

Supporters of non-lubrication are quick to point out that grease can trap grit and gravel against the wear pads because it supports their marketing pitch. The problem with this argument is that properly-designed equipment has a wear pad slide system that shields out grit and gravel to prevent galling and sanding on the pads, which can cause the pads to wear prematurely. If the gravel can't get into the wear pad, then there is no problem with grease. While the telescoping boom and underlift tubes do a good job of shielding grit from the wear pads, the slide system between car carrier beds and subframes can be a whole different situation. All Miller Industries carriers employ a shielded slide pad system between the bed and subframe. A shielded slide pad system has the bed slide-rails enclosing the subframe slide-rails from the outside. With this slide rail design, the slide pads are completely shielded from road gravel thrown from the rear tires of the chassis. Other car carrier manufacturers use a slide system that is "reversed" from the Miller slide system by placing the bed slide-rails between the subframe slide-rails, which leaves the slide pads exposed (unshielded) to road gravel thrown from the rear tires.

When deciding whether to grease or not to grease the wear pads, consider these facts:

- Grease lowers the coefficient of friction on the wear pads. A lower coefficient of friction makes the pads slide easier and last longer.
- Grease alone does not hurt the wear pads or void wear pad warranties. Keep the gravel out of the wear pads and they will perform better with grease.

At Miller Industries we are constantly researching and testing new materials and components to make your equipment operate more smoothly and last longer. You can rely on us to continue upgrading our products when new technology becomes proven and available. **24/7**

YOU TRY!

To see the benefit of greasing for yourself, hold a wear pad between your fingers tightly and have someone try to pull it out. If you have a good grip, it won't slide through very easily. Now take that pad and put some grease on it. Have someone try to pull it out again. You'll notice this time the pad will easily slide between your fingers. Your carrier with a heavy load on the deck acts in the same manner.

New Products

Series 10 Aluminum LoadRite

Chevron's popular LoadRite* approach is now available as an option on Chevron's Series 10 aluminum car carriers. The aluminum approach plate has steel bolt-in Grade 100 chain locks and replaceable stainless steel skid plates under the approach plate. The LoadRite features a unique "drop deck" design that provides superior low spoiler clearance during vehicle approach while maintaining close cable proximity to the carrier deck. It's a "simple solution" for loading sport imports, exotic cars and vehicles with long overhang. For more information contact your local Chevron distributor or visit our Web site, www.chevroninc.com.

**Patent Pending*



Autogrip for Forklifts

Chevron's Autogrip crossbar frequently seen on car carriers and wreckers is now available as a forklift attachment. Ideally suited to use on a forklift or small rubber tire loader, our Autogrip makes moving vehicles around your salvage or impound lot fast and easy. The unit is quickly installed or removed on the forks with two pins and a set of quick disconnect fittings that hook up to the forklift's hydraulic system. The arms hydraulically grip the tire and are especially convenient for use when pinching flat tires. A dual counterbalance valve hydraulically locks the wheel retainer arms in place around the vehicle's tires. For more information, contact your local distributor or visit the new product section of our Web site, www.chevroninc.com.

24/7



Mark Your Calendars

Knee deep in snow - or snowbirds? Take a mental break and start planning your 2006 get aways. Miller Industries will be going strong at all three of these shows with plant staff and equipment. Conveniently located throughout the country in cities where there's plenty to see and do. We hope to see you there!

<p>May 11 - 14, 2006 Florida Tow Show Coronado Springs Resort at Walt Disney World, Orlando, Florida For show information, 407-296-3316 www.floridatowshow.com</p>	<p>June 1 - 3, 2006 CTTA Western States Tow Show Silver Legacy Resort & Casino and Reno Event Center, Reno, Nevada For show information, 707-823-1915 www.ctta.com</p>	<p>September 7 - 9, 2006 Towfest 2006 Chattanooga Convention Center Chattanooga, Tennessee For show information, 707-799-0725 or email towfest@sbcglobal.net</p>
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- Medium-Duty Rocky Mountain Towing, Boise, ID 
- Heavy-Duty ABC Wrecker, Fort Worth, TX 
- Car Carrier Premier Towing, Anderson, CA 
- Working Truck Moore's Chevron & Towing, Coalville, UT 

SECOND PLACE WINNERS

- Light-Duty Jack's Wrecker Service, Pickerington, OH 
- Medium-Duty World Truck Towing & Recovery, Medina, OH 
- Heavy-Duty Broadway Towing, Freeport, NY 
- Car Carrier Boswell's Auto Service, Waldorf, MD
- Working Truck Eddie's 24 Hour Towing Service, Deer Park, NY

THIRD PLACE WINNERS

- Light-Duty Lee Capozzo Auto Service, North Haven, CT 
- Medium-Duty Marv's Hometown Auto, Green Bay, WI 
- Heavy-Duty Cross Island Welding, Garden City, NY 
- Car Carrier Load Star Tire & Service, Lufkin, TX
- Working Truck Matthew's Garage Inc., Cartersville, GA

Thanks to the Shine 'n Star sponsors  and *TowTimes* for furthering professionalism in the towing industry.



Loaded for Maximum Return

By Randy Olson
Vice President of Marketing

The ability to achieve your car carrier's maximum load capacity without exceeding your front or rear axle ratings while maintaining safe front axle weight for adequate steering and braking varies significantly on how the vehicle is loaded. To demonstrate how the axle weights are affected, we enlisted a new 2005 International CF 600 with a Century 21-ft. steel carrier, Mustang GT convertible, a Nissan Altima and a set of portable scales, then proceeded to load the vehicles in several different ways. Not all the methods used are recommended, but were done only to demonstrate the differences. Carrying loads that exceed the individual axle ratings or total GVW of your truck is never recommended.

1 First, we loaded the Mustang on the carrier forward and moved the vehicle forward to the cab protector to achieve our best front axle weight (5,500 lbs.) and least rear axle weight (12,100 lbs.) This is the most preferred method when hauling one vehicle.

2 Next we moved our Mustang rearward 30 inches from the cab protector. The vehicle was well centered on the bed and was well within safe towing limits. By moving our load that short distance, we transferred 640 lbs. from our steer axle to

our rear axle. If we had a heavier vehicle on the deck or were going to haul a second vehicle on the wheel-lift, the front axle weight becomes important. Many times a vehicle is not pulled all the way forward on the bed due to the length of a V bridle or chain, which is why most chain V bridles have a grab hook attached on each leg of the chain so it can be shortened to allow your load to be

pulled further forward. You may also consider hooking your chain further back on the vehicle if possible.

3 Then we unloaded our test vehicle and reloaded it on the carrier backwards. This is less desirable because we have now moved the majority of our vehicle weight

See Maximum Return on Page 30





Maximum Return Continued From Page 29

behind the rear axle of our carrier. With the vehicle 30 inches from the cab protector, the same distance as the last test, the front axle weight was 4,400 lbs. and the rear axle weight was 13,200 lbs. Compared to our first best-case scenario, we reduced our front weight by 1,100 lbs.

4 The next hookup, although we all have seen it done, should not be used. We hooked up the Mustang to the carrier on the wheel-lift with no vehicle on the bed. Carriers have a considerable amount of additional overhang behind the rear axle when compared to a tow truck and are designed to have a load on the bed to help maintain front axle weight when towing a second vehicle. With the Mustang on the wheel-lift, our front axle weight dropped to 2,220 lbs. which was about half of our empty weight, and the rear axle weight became 13,840 lbs., which is more than any of the other weights even with the entire car loaded

on the carrier deck. This should demonstrate the importance of loading the first vehicle on the bed before using the wheel-lift. With less than 50 percent of the original axle weight, this would not be considered safe and you could end up with a ticket for an unsafe load in some jurisdictions. The negative effects would be even further compounded with a heavier vehicle or if the wheel-lift was extended further out.

5 In our last hookup, we loaded our Mustang on the deck in the same position as our first scenario and picked up the Nissan Altima on the wheel-lift. The front axle weight was 3,600 lbs. and the rear axle was 15,680 lbs. When compared to our first example with the Mustang only, you can see how much difference the second vehicle makes in transferring the front axle weight to the rear and why it is important to load the heavier vehicle on the carrier. **24/7**

RECOMMENDED GUIDELINES

- Load the vehicle as far forward on the carrier bed with the front or heavier end closest to your carrier's steer axle.
- When towing one vehicle, load the unit on the bed, not the wheel-lift.
- When transporting two vehicles, put the heavier vehicle on the deck.
- Always be sure to secure the vehicle on the deck with a four-point tie down.
- Install wheel straps, safety chains and tow lights on the second vehicle.
- Do not carry loads that exceed your individual axle ratings or total GVW.

It only takes a few minutes to properly hookup your vehicle and safety equipment. Your safety and the safety of others is well worth the time.



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