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Companies are built – or broken – on promises. A promise to deliver on time – whether it's an important business package, fresh fruits to the local grocer or ice cream to the neighborhood kids – is still a promise. When a company can't deliver due to a breakdown, they turn to you because they know you and your Vulcan V-30 can get them back to the shop so they can get back on the road. Less downtime for them means more profits – and promises kept.



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Well it's been quite an exciting start to the new year with two extremely successful tow shows, The International Tow Show in Orlando and The Western States Tow Show in Reno. Both shows provided a golden opportunity for us to unveil new products, demonstrate what our equipment can do and allow our sales, production and engineering staff to listen and interact with customers, receiving valuable input as to their opinions and future requirements. This special show issue will include many pictures from these two events. Additional pictures may be viewed at our website at www.millerind.com. While there, be sure to register for your free subscription to *On Call 24/7*.

In addition to these shows, it has been a pleasure to meet and visit with many new and old acquaintances at several of the other state shows I have had an opportunity to attend this year including the Wisconsin Tow Show (see page 24). At Miller Industries, we greatly value your input. That's why we look forward to seeing and visiting with many more of you at the shows throughout the remainder of the year. Feel free to give me a call or drop me a letter or e-mail with suggestions or ideas for the magazine or about our products.

With Sincere Appreciation,

Randy Olson, Editor On Call 24/7

Miller Industries Towing Equipment Inc. 8503 Hilltop Drive, Ooltewah, TN 37363 or e-mail oncall247@millerind.com

On The Cover

Towers from around the world filled the Miller booth in Florida for some food, fun and fellowship along with a few amazing demonstrations of the world's finest towing and recovery equipment. At Miller Industries, we believe these events provide a valuable opportunity for our sales, engineering and customer



service personnel to interact with the people who use our equipment every day and to share thoughts and ideas for product enhancements and future requirements.

More importantly, we view the towing industry as a large extended family of which we are proud to be a part. The shows are truly a large family reunion where we have a chance to visit old friends, meet new ones and bond together for a common goal to build a better industry for ourselves and our children.

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Everyday Heroes

I recently had the opportunity to watch President Bush as he attended ceremonies at the National Law Enforcement Officers' Memorial in Washington, D.C. during National Police Week. As I watched on television, I remembered those days back in 1990 when I first became involved with the towing and recovery industry. I remembered how much I was awed, and humbled, by many of the people I met. These men and women from around the world willingly put their lives on the line to help others without the appreciation or respect associated with other rescue professions.

Yes, towing is a rescue profession. Towing operators face the dangers of being injured or killed on a daily basis while assisting motorists on busy streets and highways. The towing operators with their fellow rescue professionals, the firefighters and police officers, are part of that first response team called in when the general public is in need of help.



By Bill Miller Chairman of the Board and Co-CEO

And what about the risk of loss of life associated with these three professions...is it comparable? Although statistics for the towing and recovery industry are very difficult to find, the best source seems to be the Department of Labor which indicates 28 towing operators were killed in 2003 while on duty. This compares to 145 police officers and 110 firefighters during the same period. Based upon the estimated number of individuals involved in each profession, all three professions average one to two lives lost on the job annually for each ten thousand individuals employed. All three of these rescue professions then carry similar risks and so the question now arises, "How do we get the public recognition and respect for the towing and recovery profession that the police officers and firefighters receive today?"

This should be the goal of everyone in our industry. I believe it is very achievable but we must all work together to make it happen. We at Miller Industries and our state and national towing associations are lobbying to have towing and recovery recognized as part of the Department of Homeland Security's official "First Response Team." Our efforts focus on educating elected officials and building bridges between national and local associations representing our fellow police officers and firefighters. With your help we can continue to build these bridges and gain their respect and support in achieving our goal of greater recognition by the general public for our towing operators.

During my research for this article I noted that unlike our profession both police officers and firefighters have national (and some state) memorials to honor their fellow officers who have lost their lives in the line of duty. This helps focus people on the risks these professionals take in order to aid the general public. I believe it is important for our industry to have a similar focus, so the Miller Family Foundation has agreed to donate a memorial to the International Towing and Recovery Museum to be erected on their property in Chattanooga. This memorial, "The Wall of the Fallen," will honor those towing operators who have lost their lives in the line of duty. I am proud to be part of the towing and recovery industry as I know each of you are and I believe the establishment of this memorial is an important step in gaining the public recognition and respect the towing and recovery profession so deserves.





Randy Olson, Editor rolson@millerind.com

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Ken Burdine kburdine@millerind.com The Long, Lean, Racing Mechine Page 30



John Hawkins jhawkins@millerind.com Rotators: Where We've Been and Where We're Going Pages 6 – 9



Tom Luciano tluciano@millerind.com Using Snatch Blocks for the "Pick and Pull" Pages 28 – 29



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distributor today and get on the road to your next purchase.

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Purchasing the best towing equipment in the industry has never been easier. Call your local Miller Industries equipment





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Rotators

The Challenger 9909 has no problem lifting this 49,927-lb. counterweight and rotating it from one side of the truck to the other. Rotators are ideal for clearing an accident scene when heavy loads such as steel coils and machinery need to be lifted and reloaded.

Where We've Been and Where We're Going

By John L. Hawkins III Vice President of Sales, Heavy Duty Products

It's hard to believe how much time has gone by since Century and Challenger unveiled rotators. Never before had such a package been presented to the towing industry. Oh yes, we had seen conversions of older military units and variations of construction cranes being used within our industry, but never had a major manufacturer put recovery, rotation and underlift towing in one package.

In the Beginning

It was the 80s and a lot was going on in the towing and recovery industry. T.R.A.A., the national towing association, was born. Tow operators from around the country were gathering annually in June at the national show, which became a melting pot for ideas. Prominent and professional operators suggested ideas to the manufacturers. With underlift towing somewhat conquered by 1986, recovery took the forefront. Century had recently hired three engineers from Lorain Crane Company when Lorain moved from Chattanooga (Steve Carie, Randy Nekola and Ralph McConnell). Vaugh Cannon, who worked on the "Holmes Railroad Crane," also joined Century's engineering team.

With this wealth of knowledge and background, a year-long project to develop the rotator began in 1988 based around the Century 930S (renamed 1040S after testing results). The project also resulted in an all new fabricated two-stage boom. Challenger geared their design around the 60-ton 9908 and the 50-ton 8808. In spring of 1989, both companies unveiled units at the Florida show. These units, designed for recovery,

boasted new technology unlike anything in the industry: hydraulic recovery booms and winches with hydraulic underlifts and a boom that would rotate under load.

Although these units shared similarities with a crane, they went beyond a crane's lifting and elevating capabilities. This new breed of recovery equipment could reach out and down an embankment, pull on a subframe at a 70° angle and recover undetermined loads and forces.

Today's Rotators

Although each has different capabilities, our rotators are built on the crane and rail-road units' designs. We go to great expense to install our ring gears on a true level surface and in the history of our units we have never had a ring gear failure. If you load a boom from the side or tailgate with a rotator, you must place a balanced compressed

load on 360° of the ring gear. If you do not, you explode the bearing jackets within the gear, causing catastrophic damage. With this basic fundamental design used by the crane industry as our foundation, we developed a design exclusive to towing and recovery, placing ourselves ahead of all other manufacturers.

Other rotator innovations we pioneered include:

- 1) The underlift being an integral part of the design
- We applied for and received a U.S. patent on our rear recovery legs
- 3) A lightweight aluminum body
- 4) A fully functional and independent drag winch system
- 5) The industry's first true wireless proportional hydraulic system
 - A) Multi functional feather tip wireless control
 - B) Unique hydraulic system that keeps the fluids from flowing when not used
 - C) On demand piston pump
- 6) Industry's largest selection of capacities and models
- 7) A unique, lightweight, durable design
 - A) Our 60-ton units are lighter than the competition's 40-ton units
- Bumper-to-bumper product support from a full-service, knowledgeable team.

Here to Stay

Whether you're a believer or not, rotators are here to stay. They are a formidable part of our changing industry and quickly being recognized as playing a vital role in incident management worldwide. They are used every day as tow trucks capable of easily handling jobs that were very difficult with past equipment.

We still face challenges. Some states

might demand a crane operator's license for rotators, but is that so bad? To be schooled in another industry and have the wealth of knowledge and safety installed by that background? I do not think so. And weight issues exist at various state levels but I know of several states that offer exemptions and/or annual overweight permits with carrying capacities exceeding 52,000 lbs. on tri-axles. Remember, these two issues are being mentioned now, because current rotator owners are expanding their business by offering expanded services.

I was reading an article in one of our trade magazines in which a manufacturer stated that their equipment lifted more than the rated capacity. What's troubling is that they publicly admitted it. For your safety and the safety of your drivers, please recognize the dangers we deal with everyday and the reason for safe working load limits on snatch blocks, cables, recovery straps, link straps and recovery winches. Recognize and respect those limits and the damages that could result from not adhering to them. In the past five years we have lost on average 25 operators a year to some kind of accident.

When we design a unit at Miller -

whether it's a carrier or a wrecker - we know everything about that unit's capabilities. We do structural pulls with string gauge technology. We design with computers that offer the latest parametric technology and we use finite elements in-house and through outside sources for product fatigue technology. Exceeding structural ratings is the least destructive form of failures to equipment. Being able to withstand shock loads that can exceed two to three times the structural ratings is how we design our products - from basic structure to major components. Shock loads are: a cable or chain breaking under load, a cable or chain slipping under load, loads shifting, a load going over center cables getting slack and then tightening as the load stabilizes, etc. These are the real world challenges. Knowing how to protect the equipment

See Rotators On Page 8

With a spring fork suspended from a rope at the bottom of this 49,000-lb. counterweight, John Hawkins demonstrates the sensitivity of the soft touch proportional remote control. He maneuvers the load from the side of the vehicle until it is above the underlift and then lowers the fork shaft into the fork holder.





The 360° of continuous boom rotation on many rotator chassis permits the boom to be carried in a forward position to transfer more weight to the front axle when carrying a heavy load. This also provides clearance over the deck when towing trucks or fire trucks with front overhang such as ladders, snorkels or buckets, something most other tow trucks on the market aren't capable of doing.





The underlift is mounted and operates independently of the recovery boom as to not interfere with lifting or recovery situations. By designing the SDU-3 recessed into the tailboard, the operator has the ability to back up closer to his load. The optional drag winch includes a 360° rotation sheave head.

Rotators Continued From Page 7

from these challenges is what we strive for and here is why:

- 1) Have you ever pulled or lifted more than you should?
- 2) Have you ever pulled or lifted more than you should because law enforcement was demanding you to get the road open?
- 3) Have you ever pulled or lifted more than you should because what you had was just starting to come?
- 4) Have you ever pulled or lifted more than you should because there was a sense of urgency such as someone trapped or a possible loss of life?

You know the answer to every one of these questions. In the crane industry

they have days or weeks to plan their lift and transportation; you have moments to execute yours. At Miller we put tools in your hands that need to function at a moment's notice, operate safely and operate within their design envelope. Yes, we know that you stress that envelope from time to time. Every year you have allowed us to be the industry's number one provider of large, medium and light duty towing and recovery units as well as car carriers. With that said, we must being doing something right.

When it comes to rotators, no one — and I repeat no one — comes close to our units. We manufacture and deliver more rotators in a given year (and have for the past 15 years) than all other manufacturers combined. Our units

The Century 1060S demonstrates its power and versatility as it does a reverse roll on this loaded tractor and tanker, tipping the complete unit back on its wheels using one winch while the drag winch is used as a catch line to ease the load over. Recovery done from the side of the recovery unit allows for working in tighter areas and eliminates the need for as many lane closures on a roadway.

offer better towing technology than the competition. Our units are lighter in overall weight yet have a greater tonnage capacity than the competition. Combine this with documented years of rugged durability and you start to get the whole picture. And here is one more thing to consider, going back to that magazine article, we can work within our design limits and get the job done. Our equipment does that every day, unlike the competition's - at least according to them.







Miller Innovation

With years of innovative design features developed by talented engineers and great feedback from you, our models are functional and easy to use while offering the operator multi-task solutions. Consider the following:

- Totally independent underlift operation
 A) Industry proven SDU 3 independent underlift
 - B) Low Rider option with increased reach
- 2) Towing with the boom over the cab
 - A) Our competition cannot offer this feature
 - B) This transfers up to 2,500 lbs. off the drive axles onto the steering axles, allowing clearance for cranes, bucket trucks, etc.
- Three drag winch options that keep a "low center of gravity" by being mounted to the wrecker's main mounting channels
 - A) This keeps the full load off the boom, unlike our competition
 - B) Full 360º sheave head rotation
 - C) The cable can winch from three locations of pull: tailboard 1st stage 3rd stage

- 4) Option of full-power-on-command three-stage boom
 - A) The 1060S offers power to extend both the second and third stage simultaneously
- 5) Exceptional lifting and rotation capacity
 - A) Over the past 10 years at shows and schools across the U.S., we have demonstrated our units in front of thousands with excess of 50,000 lbs. documented
 - B) With these weights suspended, we have demonstrated the soft touch of our proportional controls and the ability to perform three to four functions at one time

24/7

Top Photo: The
Century 1060S is
shown lifting this
overturned mixer off
the ground and, by
utilizing both the winch
lines and deck winch,
barrel-rolling it and
setting it back down
right-side-up on its
tires.

Bottom Photo:

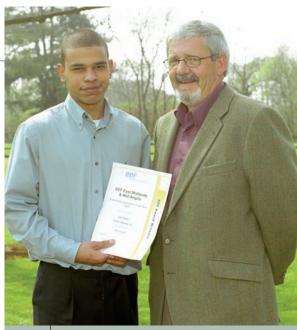
With over 14-1/2' of spread in the patented rear outrigger system, Century and Challenger rotators offer superior stability and have no problem picking up this entire mixer and rotating it from the side to the rear of the unit

Industry News

Engineering Ingenuity

The Engineers Employers Federation named Jamal Andrews, an engineering trainee with Miller Industries' Boniface plant in Thetford, England, one of the top five apprentices in the United Kingdom. John Kenedy, who manages the Boniface apprentice program, said, "We are proud of Jamal's accomplishments, having competed against the country's industry leaders such as Rolls Royce."

Like Boniface, Miller Industries' Ooltewah, Tennessee facility works with local universities to provide engineering apprentice opportunities to students. Joe Brown, Miller's Director of Engineering and Quality Assurance, said the programs have been beneficial to finding some of the sharpest new students to join the company and further grow and develop under Millers' seasoned engineers.



Jamal Andrews received his runner-up Engineering Apprentice of the Year Certificate accompanied by Miller Industries European Export Manager, Joe Storey.

AAA Back at the Tracks



AAA has returned as a major sponsor for professional auto racing as the official auto club of eleven tracks owned or operated by International Speedway Corporation (ISC) which hosts NASCAR Nextel Cup Series and Indy Racing League (IRL) events. AAA has been absent from motor sports since the mid 1950s, although several local AAA clubs continued their involvement in racing on a local level at several tracks. The AAA clubs will have displays to present membership service to race fans, along with providing complimentary roadside assistance services to fans at the ISC tracks during the weekend events.

The AAA logo will also appear on the race recovery equipment provided by Miller Industries at these tracks that include Daytona International Speedway, Talladega Super Speedway, Darlington, Richmond International Speedway, Kansas Speedway, California Speedway, Michigan International Speedway and Homestead – Miami Speedway.



YOU CAME. YOU SAW. YOU GOT MORE DONE.

You're there to help others, and the Business Class® M2 is there to help you. The Business Class M2 offers exceptional visibility by combining an extra large windshield—over 2,500 square inches, a dramatically sloped hood and superb wiper coverage. Plus, the design of our mirror system further boosts visibility and your ability to maneuver into the most awkward and tightest of spots to tackle the job at hand. To learn more about how Freightliner Trucks can help you run smart, visit us at www.freightlinertrucks.com.



We're as proud of your towing "babies" as you are so we're going to share them with everyone else. Want to see your equipment in print? Send your photos to us at On Call 24/7.



ALL IN A DAY'S WORK

Ron Pullen of Big Red Towing in Syracuse, New York, sent us another shot of a tough tow that was no match for his Century 9055/SP 850 mounted on an International Paystar. The disabled vehicle was an airport fire crash truck that had major transmission problems and had to be transported to a truck repair shop about ten miles away. The unit was to be loaded on a stretch well low boy trailer since the repair shop was told the unit was too large for any tow truck to handle. After six weeks of waiting and delays and still no low boy, the repair shop called Big Red Towing to see if they could handle the tow. Ron proceeded to the fire station with his Century 9055/SP-850, the front of the fire truck was hooked up and lifted on the 9055 underlift, drive shaft removed and headed on its way. How many times have most towers heard, you can't tow that or you will never get that out? Never underestimate the abilities of a professional tower and his Century to get the job done.

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This Century 9055, with a Trident three-stage boom mounted on a Kenworth T-904, was a real show stopper in May at the Brisbane Truck show. Lyndon Reynolds, Managing Director for Truckworks Australia,

demonstrated the scalability of his new Century 9055 as it was hooked to a tractor and driven onto a set of portable scales. Lyndon claims that in Australia it is crucial to have the proper balance in a unit to be able to both recover and tow in the casualty with a single unit. It is not uncommon to travel up to three days to retrieve a 70-ton set of doubles in the Australian outback, and you better have equipment that you can rely on to get the job done. Besides the new 9055, the Truckworks Australia fleet also includes a second Century 9055, 5030 and Challenger 6807 XLT.

This eyecatching duo turned heads at the Brisbane Truck show this past May.



VULCAN FAN

Glen Mendiaz, of Car Cab Wrecker Service Inc. in Oklahoma City, his wife Crystal and son Miles recently visited the Ooltewah plant to take delivery of their new V-70 equipped with Vulcan's aluminum body. Car Cab is no stranger to Vulcan's strength and innovation, having purchased their first heavy-duty Vulcan Model 3025 in 1992. Glen said the new V-70 was put right to work after returning home and is "doing great!" Glen is a fan of Vulcan's quality construction - that's why nine of the other units in his fleet are Vulcans. Although it will be a few more years until 5-year-old son Miles is able to drive, he can't wait until he is old enough to get behind the wheel of a new Vulcan, just like Dad.

Glen, Crystal and Miles of Car Cab Wrecker Service Inc. in Oklahoma City, Oklahoma and Vulcan Heavy-duty Specialist Brent Mournahan.

Strength, Durability and Style!

By Joe Brown
Director of Engineering & Quality Assurance

Miller Industries Towing Equipment has introduced a new innovation in wrecker body construction that combines strength, corrosion resistance and styling. The Century Midnight Express and Vulcan Intruder are now available with strong, lightweight modular composite material bodies. These bodies are 60 percent of the weight of comparable steel bodies, resist damage and corrosion and have a sleek styling not found in fabricated steel or aluminum bodies.

Our unique, composite material:

- Gives our bodies a high quality surface finish available to match popular truck chassis colors.
- Has a high strength-to-weight ratio, making it desirable for this type of application.
- Is more flexible and impact-resistant than steel. Its strength and flexibility ratings are more than double those of ABS or Polycarbonate materials.

We're not talking about a plastic veneer over a metal framework as other manufacturers offer; it is a one-piece molded structural component.

Resistance to environmental factors is an additional benefit of this type of material. It will not rust or corrode. The composite material has less thermal expansion and contraction than steel. It is more chemical resistant than painted aluminum or steel. Salt or magnesium chloride corrosion is no threat to the composite material.

The high gloss color gel coat is more than four times the thickness of normal total primer and topcoat on a painted steel or aluminum body. Any damage that does not extend beyond the thickness of the gel coat layer can be buffed back to a high gloss finish. Any damage that extends below the gel coat can be color matched and repaired. The gel coat finish will hold up to temperature extremes, and

will bounce back without damage from minor impacts from rocks, chains and other objects that would mar a painted metal surface.

The modular body is quick and simple to remove and allows easy access for maintenance and repair of functional components. This modular design also allows the bodies to be adjusted to the desired width to match the truck chassis.

During our prototype trials for the composite body we performed an unexpected "durability" test when our truck was in an accident on the expressway. The accident damaged the driver's door and running board. The body was struck with sufficient force to bend the steel mount tubes and not damage the composite material beyond minor cosmetic repair. This is real world confirmation of the strength and flexibility of this material!

If you are looking for style, durability and corrosion resistance you will find that the new Midnight Express and Intruder modular composite bodies are your solution.

Barney Cooke demonstrates the impact resistance of the new composite body as he pounds on it with a mallet. The same body section has been brought to three different shows where customers are free to pick up the mallet and pound away.

The new durable, sleek composite body is available on the Vulcan Intruder and Century 301 Midnight Express. The body is available with a smooth gel coat finish in red, white, black or gray primer.





Midtown traffic. Construction choked streets. Dumpster strewn alleys. And that's just your first delivery. Navigating city streets is no picnic. And for a small business owner, being stuck in traffic equals money lost. Your salvation? The all new International® CF Series truck—part of International's proven line of mid-sized trucks. With an exceptionally tight turning radius, unmatched reliability, high payload capacity and the industry's largest dealer network to cover your back, the International CF Series is built to perform equally well on city streets and ledger sheets.

A loaded cement

It's always challenging to handle construction company calls. Those guys appreciate your Century Rotator almost as much as you do. Cramped working space isn't a problem. Just park the rotator and go to work. It doesn't take long until the boys are back to building – and your Rotator heads out to the next call.

Whether you're using a rotator to save the day at a construction site or a self-loader to tow illegally parked cars, your Century will always be ready for you.

Relied on by more towing companies than any other brand. That's why we're #1.

Now it's all up to you You and Your



WE ARE FAMILY

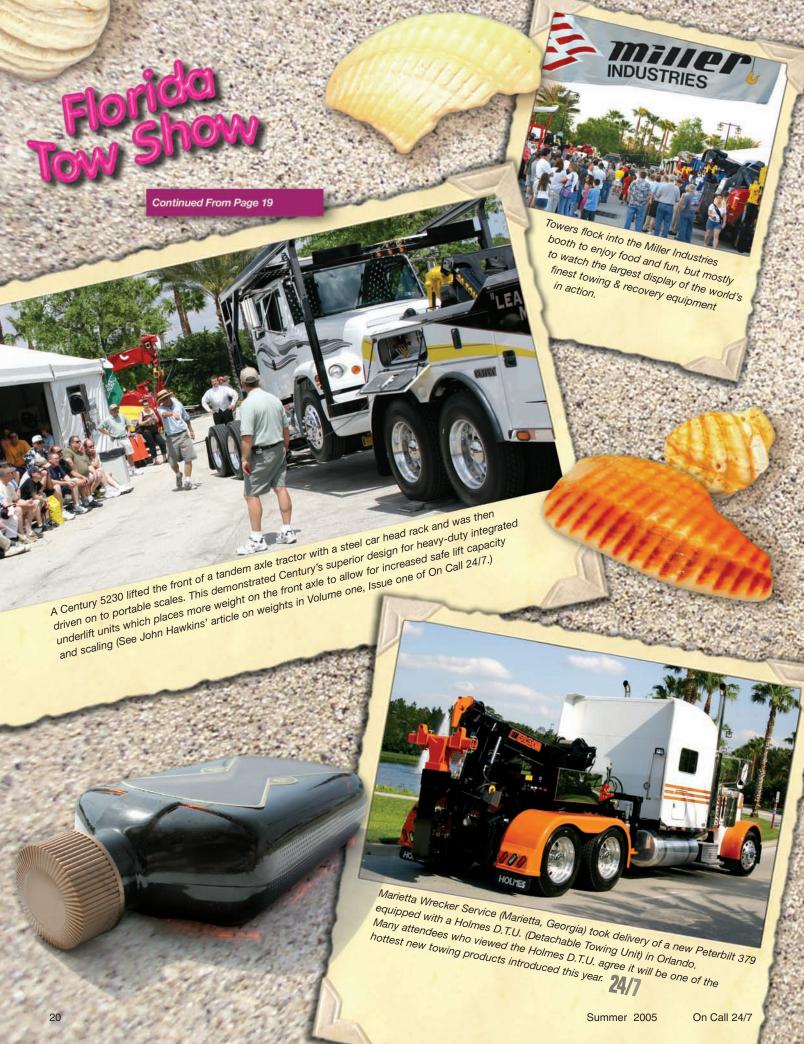


As the once popular disco tune goes, we are family – all of us who call the towing industry our industry. And there's no better place to host a family reunion than a tow show. We happily share photos from our most recent family reunions – at the Florida Tow Show in Orlando, the Western States Tow Show in Reno, Nevada and the Wisconsin Tow Show. If you weren't able to attend these great shows, we hope to see you at a show soon. David Harris, aka "Magic Boy", entertained the crowd with his magic acts, but there were no illusions when it came to the equipment demonstrations. This was tough, dependable equipment being put through the rigors that towers Paul Craze of Miller Industries demonstrates how easily the Vulcan Intruder with the new composite body can hook up to a vehicle at a 90° angle. The Miller tent stayed packed throughout the weekend as towers stopped by to visit and exchange ideas with Miller personnel including design engineers and chassis Daily demonstrations ranged from recovery techniques to the latest manufacturer representatives. It was also a great place to get out of the SUN or taln innovative designs in lift forks and towing attachments. and enjoy some of Miller Industries legendary hospitality. See Florida Tow Show On Page 20

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On Call 24/7

1-800-292-0330



Western States May 11-14, 2005 Reno, Nevada

Friday night's activities were held at the Recovery Ranch where show attendees were treated to refreshments, barbecue and several breathtaking demonstrations.

Three different recovery scenarios demonstrated ways to recover accident scenes within the lanes of traffic, these included a loaded, overturned tractor and tanker, a cement mixer on top of an automobile and a school bus, were staged to demonstrate Miller recovery equipment. Recovery tips were provided by Tom Luciano and John Hawkins.

MM YAGIRA RECOVERT ROUND peno Hilton & Convention C 3M 5:00 pm

The evening began with the audience being invited to participate Ine evening began with the audience being invited to participle in the dramatic unfurling of three historic 45' x 90' American in the dramatic unfurling of the Marianal Elas Trick In the gramatic unturing of three distoric 45 X 90 American Flags provided by Marc Valentine of the National Authors

Flags provided by Marc Valentine and the National Authors

Exhibit Coloid Marines Malch and the National Authors riags provided by ividic valentine of the National Anthem.

Exhibit. Soloist Maureen Welch sang the National Anthem. See Western States Show On Page 22







New Products



Multi-functional LED Light Option

Finally a LED light designed to fit a 6-inch oval opening common on most tow truck bodies that has multi-functional use. This light functions as an auxiliary running light when driving down the road but can also serve as a bright LED strobe when you are parked at the scene for added safety and visibility.



Aluminum Storage Box Now Available

Custom made to fit into the tool compartment on most Century or Challenger heavy duty triaxle bodies, this sturdy three drawer aluminum storage box is ideal for your hand tools or small parts. Keeps your truck more organized and enables you to work more efficiently.



Stay On Course

The Pioneer in dash touch screen navigation system includes XM upgradeable AM/FM Radio, CD player, and integrated rear view camera with night shot. Navigation System provides the operator with real time information of location, ETA to destination and maps of North America.

For more information or to purchase any of these new products, visit your local Miller Industries Distributor.

chassis profile

Ford Super Duty

Last year Ford introduced the new improved Super Duty and it has quickly become the preferred Class 4 and 5 truck chassis in the towing and recovery industry. Better yet, it's ideally suited for Miller Industries' popular self-loading wheel-lifts. So what's made the new Super Duty so Super?

A 22 percent improvement in turning radius makes this truck the most maneuverable Super Duty ever, perfect for hooking up in tight areas. The front coil spring suspension and mono-beam front axle are all new and have really improved ride and handling. The front axle has been widened 5.25 inches. The tighter wheel cut provides an improvement of 13.9 feet in wall-to-wall turning radius. It also includes a new more robust steering gear box that generates a 24 percent increase in turning torque. That means a lot less effort for the driver and better control. And at 7,000 lbs. capacity, the front axle is rated a full 1,000 lbs. higher than the previous model.

Owners love the 6.0L Power Stroke, now rated at 325 horsepower and 570 lb.-ft. of torque. The Power Stroke engine comes with a 60-month, 100,000-mile limited warranty. A gas engine is also offered: the 6.8L 3-valve V-10 pumps out 362 horsepower and 457 lb.-ft. torque. Miller now stocks 6.8L V-10 powered units in addition to Power Strokes.

Super Duty is surely one of the most powerful trucks in its class but it's also one of the easiest to drive with Ford's new 5-speed TorqueShift™ automatic transmission that features Tow/Haul mode. Depressing the Tow/Haul button alters the shift points of the transmission, enabling the transmission to stay in a gear longer and shift at higher RPM points thus making big hills and heavy loads less of a problem.

Braking is important too and the Super Duty simply has the biggest and best brakes in class. The calipers are 30% stiffer and are complemented by thicker, fully



vented rotors. And we are talking big rotors: 14.53 inches in diameter on the front and 15.35 inches on the rear. A new 4-wheel Anti-lock Brake System with a new master cylinder controls it all. It's one great brake system that makes the Super Duty a safer, more durable truck.

The new upfitter option includes four switches located in the instrument panel. This popular feature makes the installation of electrical accessories quicker and easier. The switches are connected to relays and tied to the ignition system, eliminating the need to cut the dash or bolt aftermarket switch panels on your new Ford Super Duty.

Stationary elevated idle control, used for PTO operation, is now included with the 6.0L Power Stroke and eliminates the need for the auxiliary idle control kit.

Ford offers the F-450 and F-550 in three cabs styles, Regular Cab, Super Cab and Crew Cab. Miller Industries stocks the Ford F-450 with an XLT interior trim package in both Regular Cab and Super Cab (the only extended cab with four doors). There are

many interior trim options from which to choose. Vinyl and cloth interiors are available, and you can always upgrade to Lariat and choose leather with the Super or Crew Cab. With three cab options and several different interior seating and trim options, you can get durability, functionality and comfort.

Additional improvements include a bold new grille, new dual-beam headlamps, new front bumper, new instrument panel, new turbo boost gauge, heavy service suspension package, Tow Command integrated trailer brake and increased Gross Vehicle Weight ratings. Add a three-year, 36,000-mile limited warranty and you see why Ford F-Series is Miller's #1 choice.

Miller industries also offers their new composite body on the Vulcan Intruder and Century Midnight Express with a colored gel coat finish in red, black or white to match the cab of your new Super Duty.

Your local Miller distributor can tell you a lot more about the Super Duty. Ford trucks and Miller equipment — now there's a better idea!



THINKING OUTSIDE OF THE BOX

By John L. Hawkins III Vice President of Sales Heavy-Duty Products

One of our strengths as a manufacturer is our ongoing commitment to producing the strongest, most powerful towing and recovery equipment in the world while reducing the unit's overall weight. One way we've accomplished this is through the use of high tensile steel such as T-1 or Domex that have yields of 100,000 to 120,000 psi. By fabricating recovery booms and underlifts out of this steel, we have been able to increase capacities, maintain lower profiles on underlifts and reduce weight when compared to using formed tube.

Another means of reducing weight was to change the material used to produce boxes. After evaluating many different types of materials, aluminum was the clear choice. In 1994, Century introduced the 5030 with aluminum boxes, reducing the weight by over 900 lbs.



Structural aluminum extrusions are used as a framework for the panels and compartments on the aluminum boxes for Miller Industries' heavy-duty towing and recovery units. The same company that supplies the aluminum cabs and sleepers for North America's premiere heavy-duty chassis manufacturer also supplies our boxes.

OVER THE PAST DECADE, ALUMINUM BOXES HAVE CONTINUED TO EVOLVE WITH FEATURES THAT INCLUDE:

- Built-in storage for lift forks and popular lifting attachments
- Functional layout of compartments with adjustable shelves and racks
- Tailboard storage
- Internal channels to route wiring for better protection and to keep it safe from the harsh outside environment
- Internal hinges and automotive-type door latches
- Custom aluminum extrusions that provide increased strength and better styling
- Aluminum tread plate on the top of the boxes to allow the operator or service technician to safely walk on top of the boxes
- Automotive quality door seals and built-in drip guards for better weather protection inside your boxes
- · No rust and better corrosion protection
- · Less weight

Aluminum boxes have become the leading choice on most Century and Challenger heavy-duty integrated, fixed boom and rotators built today. Vulcan recently introduced aluminum to their heavy-duty body choices. To help prevent those "scale house blues" and increase your payload, aluminum is the clear choice over steel or the competition's so-called "composite" panel modular boxes which are aluminum frame with resin doors and panels.

Towing is unique as an industry because we purchase our cabs and chassis from various manufacturers and use them in a way that reaches beyond their original design purpose. Think about that for a minute. We actually use chassis in applications for which they were not designed. For instance, a tow truck carries loads NOT on top of the frame rails (which is how chassis are designed), but instead off the tailboard of our units. This difference is significant because every component and material that is used in our manufacturing process will structurally and cosmetically impact the performance of the power plant.

We've always stressed that our team's many combined years in the towing industry have positioned us as #1. There's nothing in our manufacturing process that is an afterthought. We are not the farming industry. We don't add counterbalance weights to a perfectly designed unit. For our purposes, every pound of counterbalance weight added behind the cab to make it tow properly reduces payload to the rear axle. If that counterbalance is placed behind the cab, you've added weight not only to the steer axle, but also to the drive axles and simply put, reduced your payload capacity.

Towing without a doubt is a company's largest source of income. Though recovery is the primary reason most towers get out of bed (and what we live for), it takes a financial back seat to towing. If your heavy-duty unit is not designed with that in mind, then maybe you need to evaluate your choice in heavy-duty towing and recovery equipment.

SAFETY TIPS



DON'T USE DAMAGED CABLES

on your tow truck. Become familiar with the various types of cable damage. Carefully inspect all cables being used in a recovery operation for damage before starting to pull.



AFTER RIGGING CABLES.

never begin pulling without rechecking connections. Make sure that all cables and snatch blocks are securely attached and cannot accidentally pull loose.

Using Snatch Blocks for the "Pick and Pull"

By Tom Luciano District Sales Manager

In a recent seminar held for the Garden State Towman's Association, many recovery scenarios were set up for demonstration purposes. The following photos depict a scenario that showcases the use of snatch blocks.



1) A mixer with a partially loaded drum is positioned as though in a driveway next to a house. The box trailer serves as the house. The left rear tandems are dropped into a drainage pit and the trunnion is firmly wedged into the culvert. This demonstration simulates a recovery in a confined area. The approximate weight is 35,000 lbs. All brakes are locked on the casualty to add additional resistance.

Our goal is to demonstrate the importance of levers and how they can assist in recoveries. First, the right winch line is routed from the tow truck, two-parted, and returned to the head of the boom. A round, endless loop strap is positioned from the rear middle suspension area of the mixer and routed to go around the barrel of the mixer forward. Two shackles are installed at each end of the strap. Shackles are necessary to protect the strap from being cut.



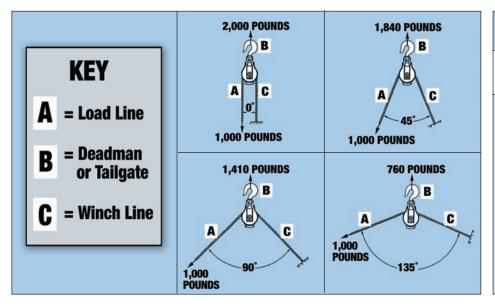
2) The left winch line is then run down to a snatch block that is attached at the D style weldment ring on the back of the 9055. The line is then routed to the low side or left front frame area of the mixer. The boom is raised and extended, setting you up for a "pick and pull" method. Don't just pull, but think of what caused the problem. Is it not the left rear tires and suspension? Then that's where you need to focus.



3) Due to the load's weight, we use a two-part line to the rear because 3/4" wire rope has a working load limit of around 14,000 lbs. Since we are using 50,000-lb. winches and the winch line will be doing most of the work, I want to work safely and decrease line tension. We also slow the line speed by using a snatch block and a multi-part line. Speed is not a good thing when one is engaged in heavy recovery. Notice how we have positioned the tow truck at an angle to the casualty and not straight on. This is because when we can position the recovery vehicle even at the slightest angle to the recovery, we actually use the length of the mixer to assist us in the recovery by pivoting the mixer on the right rear tires and rotating the casualty out. If we are in a straight line with the casualty, we have to pull all the resistance at once to pull the vehicle out.

A helpful hint:

The right winch line returns to an endless loop strap positioned at the end of the boom. Many times an operator does not have the proper size screw pin shackle to install in the center-positioned eye. An endless loop strap like the one on the rear of the mixer works well to balance the load on the boom — plus it will not scratch your paint.



and	Multiplication Factor
Load Lines	
10°	1.99
20°	1.97
30°	1.93
40°	1.87
50°	1.81
60°	1.73
70°	1.64
80°	1.53
90°	1.41
100°	1.29
110°	1.15
120°	1.00
130°	.84
140°	.68
150°	.52
160°	.35
170° 180°	.17 .00

Now let's talk about the snatch block at the tailgate and what the forces actually are on the rear of the tow truck. The high line that is terminated at the head of the boom causes an action of downward force. This drives the rear spades into the ground, which gives you stability. Please follow the attached diagrams: the 90-degree angle at the tailgate that the snatch block forms has a lifting effect.

If we are pulling a 1,000-lb. load with the line at the tailgate and we multiply it by the angle factor of 1.41, the lifting on the tailgate is actually 1,410 lbs. instead of the 1,000 lb. force we are pulling. When you use both of your winch lines down to the tailgate D rings then out to the recovery, you can never stabilize your truck because the lifting effect is greater than the resistance. Very often you see tow operators try to upright tractor-trailer units by what I

call pigeon toeing - or going to the lowest point of the tow truck then installing a snatch block and running the winch line upwards to pull down on the casualty. The angle may be at 30 degrees therefore a load resistance of say 10,000 lbs. times the 1.93 multiplier is lifting 19,300 lbs. on the rear of your tow truck. WHY?

Using the pick and pull method while positioning your tow truck at the best angle possible provides the absolute best results in a recovery situation. One line is forcing downwards driving the spades in the ground while lifting the casualty. The low line is turning, pivoting and winching the casualty forward. This recovery tool is very helpful in all small and heavy recoveries. And remember, always work within your working load limits and know the capacity of your towing equipment.



The Long, Lean, Racing Machines

By Ken Burdine Miller Race Recovery Specialist

History was almost made at this year's Indianapolis Motor Speedway as Danica Patrick was the first female to lead at the prestigious race. Although it looked like Danica was going to need a tow with a spin midway through the race, she was able to recover and continued on but several other drivers weren't as lucky and needed help off the track. Our fleet of eight Vulcan 892 recovery units and five Vulcan 21' carriers were ready for action.

Not only does Miller Industries supply the recovery equipment for Indianapolis Motor Speedway, on Independence Day weekend, we'll have four recovery units and two carriers at the IRL event at the Kansas Speedway. During the same weekend, we'll also have seven recovery units and five carriers ready for action at NASCAR's summer visit to the Daytona International Speedway.

There are only a few differences between the Century 602, 612 or Vulcan 892 recovery units used on the speedways for open wheel events and the ones in towing and recovery fleets nationwide. The most noticeable difference is the use of boom extensions.

Due to the design of IRL racecars, it is

necessary to hoist the car completely off the ground when towing it off the track. The IRL safety team attaches a harness to the car and then attaches it to the hook at the unit's recovery boom. The recovery personnel then raise the entire race vehicle. Once the car is lifted, a tarp referred to as a diaper with a special absorbent liner, is placed under the car if it is leaking any fluids. The car is then rotated until it is inline with the recovery unit, with the rear wing towards the truck. Before the racecar can be towed, it is secured to the back of the recovery unit with cinch straps. It is necessary to use the specially built boom extension to allow additional clearance for the rear wing to assure it does not contact the back of the recovery unit.

"It is reassuring to know that Miller Industries always brings the highest quality recovery equipment to the race track, along with the professional operators to assist us" says Dave Brown, Safety Coordinator for the Indy Racing League.

Besides Kansas Speedway and Indianapolis Motor Speedway, you will see Miller Industries Race Recovery equipment working IRL events at California Speedway, Homestead-Miami Speedway, Michigan International Speedway, and Richmond International Speedway. From the near sixteen second



Another racer's day ends as one of the recovery crews at the Homestead-Miami Speedway hauls the driver's car off to the garages.

laps at Richmond to the wheel to wheel action at California, the IRL is truly an exciting series.

If you are one of the over 300 volunteers who make our Race Recovery program possible and help promote a positive professional image of the towing industry, again thank you very much.

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