

MPQ

MUNCIE POWER QUARTERLY



TITAN[®] MC1



**EASIER
INSTALLATION**



**LONGER
LIFE**



**HIGHER TORQUE
RATINGS**



**MEDIUM
DUTY**



LOOKING TO THE FUTURE WITH OUR PEOPLE IN SIGHT

Looking back on your wins and losses can be really fun and a good tool to help set the course for the next year. Looking forward five to 10 years and imagining the future can be even better. Many economists are citing one of the reasons for the good economy in the U.S. today is that CEOs are once again focused on the future rather than just how to make a profit today and survive. I can't validate this notion, but it certainly makes sense to me.

I like to end the year with a healthy dose of reviewing the most important success metrics in our business—engagement scores, employee turnover, promotions and accidents. Let's not forget profitability, sales growth, market share and new product introductions. Lastly, I like to evaluate our cultural initiatives—things like sales processes, manufacturing innovation, Lean initiatives, IT initiatives—all that improve our overall ability to communicate and function in an ever changing business climate.

All of these things have real and purposeful value. However, I think looking five to 10 years out has even more purpose. Try looking with a new set of business lenses and with your dashboard of traditional metrics in your rearview mirror. Let's consider what you might want to contemplate for creating value for your company for many years to come. Here's a few ideas:

Do you have the tools in place to:

- Recruit the best people in the industry?
- Train your people on not only the best methods to do their job but also live a balanced, healthy and financially successful life?
- Have a plan for growth for each and every person in your company?
- Ensure you are providing a great physical environment for your employees?
- Develop great leaders to ensure maximum engagement of your people?
- Compensate your people for their contribution?
- Ensure that while people come and go, your culture remains strong?

Once you run through this checklist, you will have a much better feel for what life will be like in your company in five to 10 years. The mechanics of sales techniques, manufacturing processes, supply chain initiatives and product development will always be preceded by hiring, training and taking care of your people. We all already know it – *the company with the best people wins!* We just need to continue to prioritize our thought process to make certain that our people come first in all of our decision making processes.



Ray L. Chambers

Chairman, CEO & President

Ray Chambers joined Muncie Power Products as Vice President of the Tulsa (Oklahoma) Division in 2004. He became President of the company in 2009, and was named to his current position in January 2012. He holds a bachelor's degree from Oklahoma Wesleyan University and a master's degree from Southern Nazarene University in Bethany, Oklahoma. He is a thought leader and visionary within the industry.



Fire & Rescue Market Review

Products You Need to Know

Many of us have seen a picture or a scene in a movie of firefighters in the olden days forming a bucket brigade — a line of people passing buckets of water between each other from a body of water to a fire in an attempt to put it out. In the 1800s, Eastern cities began developing wooden pipes that would transport the water to the people — instead of the people going to the water. Within these wooden pipes there were plugs, which the firefighter would tap into to get to the water. Thus, the first fire hydrants were born. Obviously, things have changed dramatically over the years.

Today, there are basically four ways to get water to the fire. The first is directly from hydrants. Another method is called a draft, where firefighters get water directly from say a pond, river or ocean. The third way is from a truck called a pumper. This is a fire truck that can hold up to more than 1,000 gallons of water and sprays the water using a pump. The last way is for a truck that holds water to go to a fire and transfer its water to the pumper.

How does this affect Muncie Power Products? As a provider of power take-offs and other fluid power components, Muncie

Power Products continues to develop its products to meet the needs of the work truck industry and supply a power take-off to provide the power necessary to move the water from the tank of the fire truck and through a pump to spray water to put out a fire.

With Muncie Power's new Titan® MC1 Series for example, the PTO uses caged, needle bearings in the clutch hub — which keeps the bearings apart so that there is less friction and heat. This innovation offers the capability of running output shafts up to 4,000 RPM on some applications. It is this capability that enables firefighters to run their water pumps at high speeds, which is a feature most products could not do before. These bearings have also been included within our other clutch shift model PTOs, such as our CS40 Series, which can be used on larger water pumps.

Another new feature that can be used in conjunction with the Titan MC1, an electric-shift PTO, for fire and rescue is known as Muncie Start. Instead of your sudden on-off engagement, which can be hard on the bearings, PTO and the equipment, you are trying to start up like water pumps, generators,

etc., Muncie Start — an electric module — allows for a modulated, ramped-up engagement of the power take-off.

Internal lubrication is yet another important feature for this market and is new to Muncie Power clutch shift pumps. This puts an oil film on the bearings to keep them cool and ups the ability, among other things, to offer one torque rating on the PTOs. As a result, we do not have to derate them for continuous duty.

Like the fire and rescue market, the products that go on these trucks continue to evolve and change to better meet application needs. From bucket brigades to power take-offs with caged, needle bearings and electric modules — we've come a long way. ♦



Steve Smith
Market Specialist

With more than 40 years in the heavy-duty truck business, Steve Smith holds an Associate of Arts from Semiole State College. His hobbies include spending time with his family, woodworking and golf. Steve and his wife, Christy, have been married for 27 years and have two daughters, Elyssa and Ashlyn.

BUILT STRONGER TO LAST LONGER

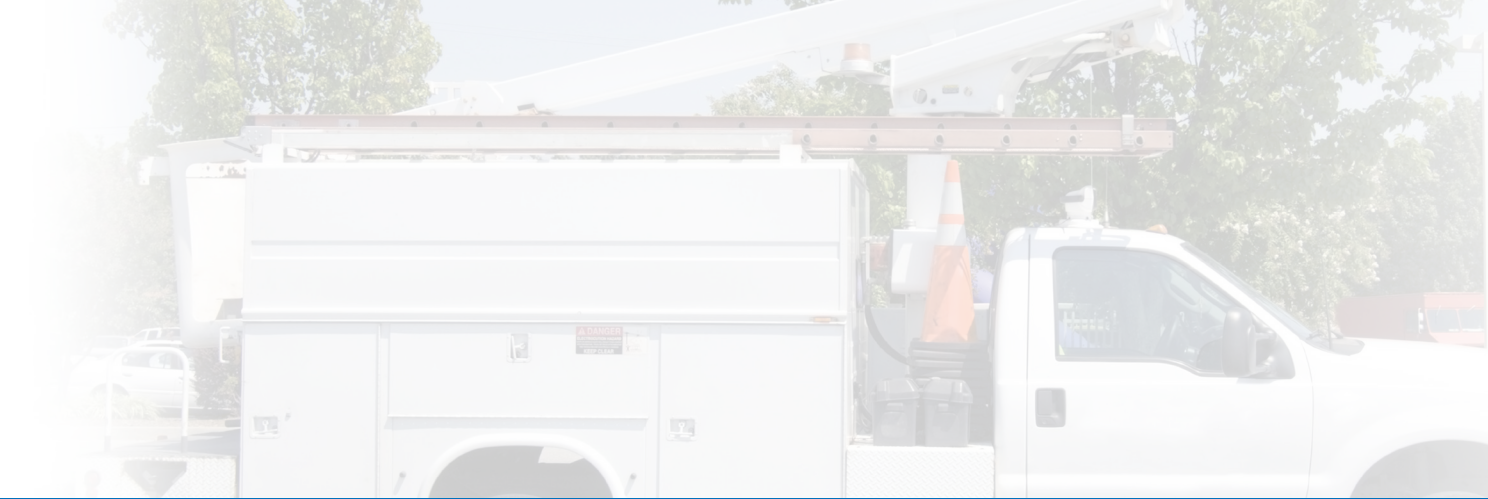


MC1



TITAN®

Muncie Power's
Titan® MC1 Series
power take-off is
the first in the
company's lineup
of Titan Class
power take-offs
to be released.



The Titan MC1 is a medium-duty, 10-bolt clutch shift PTO designed to fit Allison 3000/4000 Series transmissions. Applicable within nearly any market utilizing a Class 6 to Class 8 truck with an automatic transmission, Titan MC1 sets itself apart from the fold as a triple threat with higher torque ratings, increased durability for a longer life expectancy and an easier installation.



EASIER INSTALLATION



LONGER LIFE



HIGHER TORQUE RATINGS



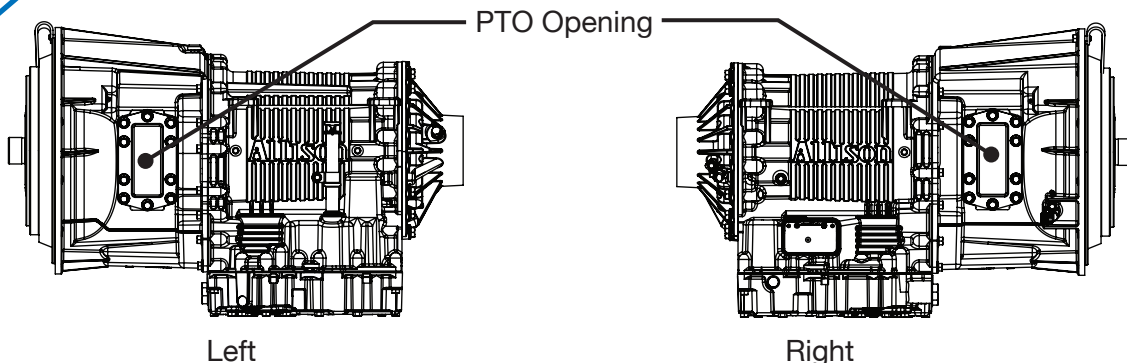
EASIER INSTALLATION

Due to key features integrated into the Titan MC1's design, the power take-off proves easier to install with increased clearance and access to the mounting flange with the ability to hand tighten mounting bolts prior to torquing. These key features consist of a unique shift cover and solenoid that allow for 360 degrees of rotation, a pump flange with full rotation at 30-degree intervals and a redesigned housing that allows for maximum clearance for installation on tight-fitting envelopes including Hino trucks. While redesigned, the Titan MC1's housing still fits within the same envelope as the legacy unit.

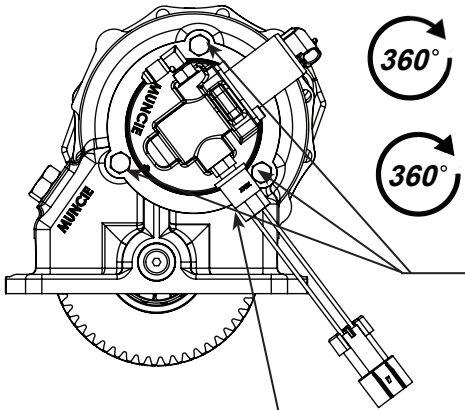
Assembly Arrangements

The Titan MC1 also offers three assembly arrangements to allow for mounting on either side of the transmission as well as on the top right.

Allison
3000 Series



TITAN[®] MC1

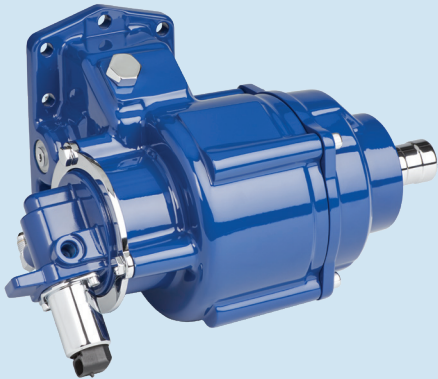
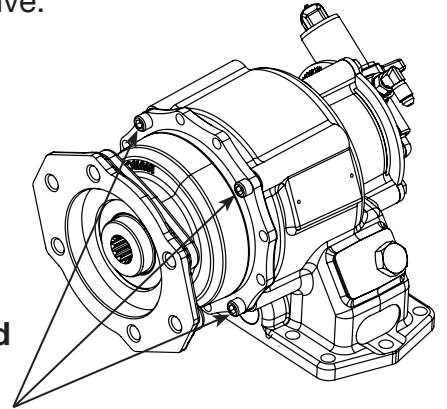


Pressure Switch
Torque to 10 ft.lbs.

Loosen capscrews to rotate valve.
Re-torque to 3 ft.lbs. (2 plcs)

Loosen, but do not remove,
to rotate valve body.
**Once positioned, re-torque
to 13 ft.lbs. (3 plcs)**

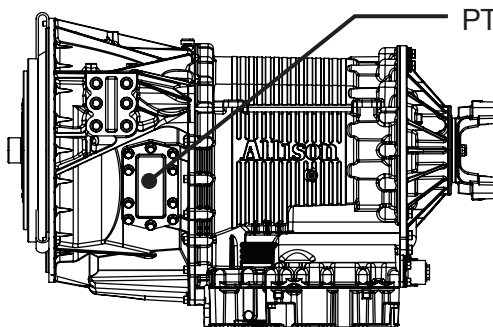
Remove to rotate output cover.
**Once positioned, reinstall and
torque to 18 ft.lbs. (4 plcs)**



An easier install, but how?

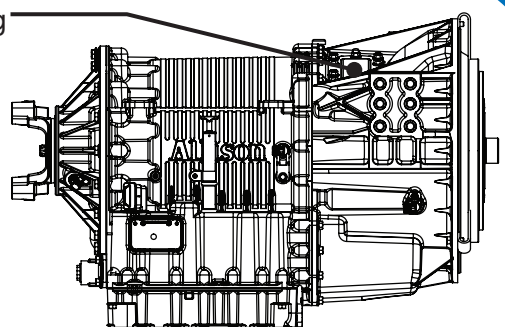
- Unique solenoid allowing 360-degree rotation
- Ability to hand tighten mounting bolts prior to torquing
- Easier access to flange mounting bolts
- Unique shift cover allowing 360 degrees of rotation
- Pump flange with full rotation at 30-degree intervals
- Redesigned housing, maximum clearance on tight-fit installations

Allison
4000 Series

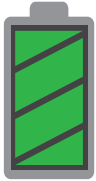


Left

PTO Opening



Top/Right



LONGER LIFE

A number of product enhancements are incorporated into the Titan MC1 using better manufacturing techniques. These enhancements contribute to a more durable, robust power take-off built to better withstand wear and tear for longer life expectancy. Due to its enhancements, the Titan MC1's durability and life expectancy surpasses that of other truck-mounted power take-offs currently on the market.

What keeps the MC1 going longer for

dump, fire and rescue, refuse, utility, tow and recovery, snow and ice and bulk hauling markets

- Improved clutch pack design
- Improved tapered roller bearings
- Increased input shaft diameter
- Maximized gear design
- Reduced leak paths between the output mounting flange and cover
- Internally pressure-lubricated bearings



Stop the torque spike

Muncie Start® available for Titan MC1

Use shift code:

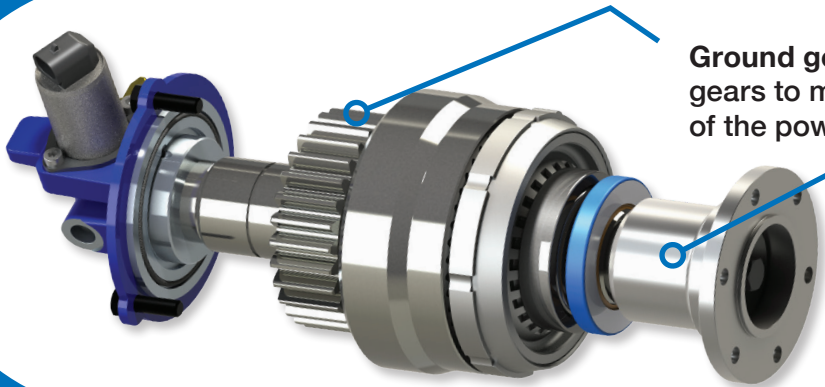
SX – **Muncie Start®**
12VDC Integral

SR – **Muncie Start®**
12VDC Remote Mount



HIGHER TORQUE RATINGS

Across its nine speed ratios, the Titan MC1 features higher torque ratings for medium duty with a maximum 415 lbs.ft. intermittent/continuous-duty rating. No derating is required for continuous-duty applications with the Titan MC1's single torque rating for both intermittent and continuous duty.



Ground gears provide the highest quality of gears to more effectively meet the demands of the power take-off

Larger output shaft supports higher torque applications not generally seen with a medium-duty PTO

PTO TORQUE & HORSEPOWER RATINGS

SPEED RATIO	INTERMITTENT/ CONTINUOUS HP @ 1,000 RPM	INTERMITTENT/ CONTINUOUS TORQUE LBS.FT.	INTERMITTENT (KW) @ 1,000 RPM	INTERMITTENT/ CONTINUOUS TORQUE (NM)
05	77	400	(57)	(542)
06	77	400	(57)	(542)
07	79	415	(59)	(563)
08	69	360	(51)	(488)
09	65	340	(48)	(461)
10	59	310	(44)	(420)
11	52	275	(39)	(373)
12	50	265	(37)	(359)
15	39	205	(29)	(278)

Approximate Weight: 47.2 lbs. (21.4 Kg.)

TITAN[®] MC1

Industry Insight: In-house Counsel *by Damon Elmore*

The partnerships with our customers extend beyond the sales process, the assembly cell and the garage. Often times, we collaborate in other areas such as accounting, law, engineering and matters involving information technology. In this feature article, Sr. Executive Director of People

Strategy and General Counsel Damon Elmore chats with Aldos Vance, general counsel for Altec Industries, Inc. We are grateful for customers like Altec Industries, Inc., and all of our other customers, clients, partners and friends. Thank you for your business and support. ♦

Q. Not too long ago, I remember one of my daughters bluntly asking me, “What do you do?” So, in a similar fashion, what does Altec do, and if you had to summarize your work for them, how would you do it?

A. In simple terms, I am a risk manager and counselor. But I am not a counselor in the therapeutic sense. Even though some days I feel like that I am. Officially, I am responsible for managing employment and labor litigation, associate safety, and product safety.

Q. You also told me about a regular meeting you have where you bring all of your outside counsel together to provide an update, but also strategize about opportunities and potential legal challenges. Tell me more about that.

A. One of Altec’s core values is teamwork – not just internally but also with our network of outside counsel. It is important for our network of attorneys to understand that we are all on the same team and working together to provide solutions for Altec. The exchange of ideas during our strategic sessions not only benefit Altec but the knowledge shared allows outside counsel to better serve their other clients.

Q. How do you manage to stay current on industry trends, challenges and happenings?

A. Industry magazines, legal in-house counsel magazines such as the ACC Docket, and CLE conferences like the International Association of Defense Counsel’s Corporate Counsel College are great ways to stay current on industry trends and challenges. *The Wall Street Journal (WSJ)* is also very important to understanding business and global trends. The WSJ is a staple of the C-Suite and therefore, you should also make yourself aware of the same. Lastly, stay current with local news. Overall, it is important to understand external forces that may impact your industry.



Q. Name three things you would recommend to someone that is considering an in-house role for a supplier, OEM, vehicle up-fitter, or other part of this industry. Is there particular advice that would support diversity and inclusion initiatives or candidates?

A. In-house positions require attorneys that are well-rounded and have varied experiences, including some private practice experience. I am a huge believer that in-house attorneys must have experience beyond law school. As it concerns diversity, diverse thoughts and experiences allow organizations to avoid a homogenous approach to problem solving. Variety equals value.



Q. What do you feel is the biggest misperception about our role as business people specializing in legal? Then, can we overcome it, and more important than that, in what other ways can we support our business?

A. In my opinion, the biggest misconception, internal or external, is that an attorney's role is to erect road blocks. Business people must understand that there is an inherent partner-guardian tension with being in-house counsel. But at the end of the day, I see my role as identifying risks, counseling accordingly, discussing and presenting options, but ultimately protecting the organization. Ethically, my fiduciary duty runs to the organization and not to one individual.

Q. In a conversation we had recently, you gave me some good advice to attend a trade show and other events in order to see, first hand, what we do and learn from our operations partners. Why else is that important, and would you also suggest that to other non-operational roles like HR or finance?

A. The more you understand your internal clients the better you can serve them. Non-operational roles have a tendency to isolate themselves and become siloed. Likewise, operations must put themselves in the shoes of those business partners, this includes legal and compliance, that support them in order to better understand the impediments that exist and how to partner in order to overcome those obstacles.



For the complete interview, visit us online at munciepower.com.

Have tips or insight you'd like or be willing to share regarding general counsel or human resources?

Contact: Sr. Executive Director of People Strategy and General Counsel
Damon Elmore at delmore@munciepower.com.



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