



Dal Soggio Sphere

SPHERE HYDRAULIC CARTRIDGE is an innovative, high performance hydraulic cartridge for demanding racers by Dal Soggio. Excellent for offroad and motocross applications.

Why choose SPHERE?

The answer is very simple. This particular sealed and pressurized cartridge considerably increases precision and sensibility of the front end, giving better feel and bump absorption. The components are both high quality and built to be durable. With high quality coatings, precision in house machining, and settings developed to win you won't be disappointed.

Which model of front fork is available?

SPHERE is available for all the following models and more to come: WP AER, 4CS, WP OPEN, SACHS, MARZOCCHI, SHOWA 49mm TAC And KAYABA PSF2

Inquire with N2Dirt about installation, springs, service, and settings.

[**Our Testing/Review With Motocross**](#)

Action Magazine



DLC Coating

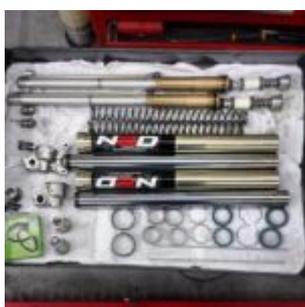
DLC coating (Diamond like Carbon) DLC coated inner tubes greatly reduces the friction, which provides smoother action over sharp impacts. The DLC coating is also harder and smoother than the standard chrome, and resists nicks from rocks that can create sharp nicks into surface which in turn cuts the oil seals that can turn into leaks.

Pricing includes removing and installing fork lugs. (some lugs may be damaged when removed and will need to be replaced.)



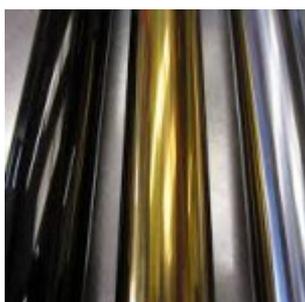
Fork Overhaul/Rebuild

Front fork is completely disassembled, ultrasonic cleaned, and inspected. Worn parts are replaced, damaged shims are replaced in stock configurations (standard settings are retained). Front fork is reassembled using genuine parts and high quality racing fork oil.



Fork Revalve

Please fill out our rider data sheet [HERE](#) to determine what needs to be done, the fork is completely disassembled, cleaned and inspected. Worn parts are replaced, then modifications to the damping system are done based on our interpretation of what the rider needs. The fork is reassembled using genuine parts and oil level is set.



Hard Anodizing – Fork Lugs

Fork axle lugs hard anodized black. This makes the fork look like new and covers up imperfections due to roost and rock damage.



Hard Anodizing – Fork Tubes

Fork upper tubes anodized. Not a performance gain but this will make your bike stand out from others. We offer glossy black, clear, and matte black.



Kashima Coating – Shock Body

Kashima Coat is a proprietary hard anodizing process that involves lubricating molybdenum disulfide deposited via

electrical induction into the billions of micro-pores on the surface of hard-anodized aluminum for better lubrication and less abrasion and wear. This can only be done in Japan so check with us for a core swap or plan on 6-8 weeks down time for shipping and treatment.

Price is with good core swap only.



MXT LUCKY 4CS

MXT LUCKY 4CS System.

The new MXT Lucky System (Lucky) is the newest advancement for WP 4CS forks. The Lucky system is the result of innovative engineering and a commitment to bring riders the best value in the suspension market. Lucky Nichols, a professional suspension tuner, was discussing some long range fork projects with Jeremy Wilkey, and suggested that the existing MXT 4CS Asymmetrical kit could be “repackaged” with the new cartridges and hardware that MXT is currently producing. Major enhancements include:

- Over a pound lighter than stock 4CS forks
- Increased cartridge volume to a 22mm diameter
- A redesigned Huck Valve
- New compression and rebound adjusters
- Quality machining to reduce friction
- DIY: Drop in ready system

As a pioneer of 4CS solutions, MXT has made many improvements to the stock system by building on the existing strengths. MXT continues to refine the 4CS product using solid in-house engineering based on rider feedback. Attention was given to make the 4CS forks “plush” while maintaining the control required to ride aggressively.

The Lucky forks exhibit better handlebar feel, steering response, and traction since they are lighter than stock. An increase in cartridge volume provides more control and support through the middle of the stroke. As an example, riders also notice the inherent stiffness of a stock 4CS fork. This is due to a valving set-up that requires stiff settings to control large fork movements, which produce frictional effects and forces created by cartridge pressurization. With the Lucky, the new 3 port mid-valve piston can be adjusted to improve the initial feel and reaction. The Lucky also includes the proven Huck Valve, designed to increase volume while allowing for additional pressure transfer parallel to the system. New adjusters were added to simplify tuning for the rider. Finally, attention was given to better machined bearings and pressurized seal surfaces to reduce friction.

Traditional stock bottoming control system is limited in that it can't manage multiple speeds or accelerations inside its travel. Stock systems can be adjusted to provide good control for either low or high-speed bottoming, but doing so limits the ability to absorb the other. The MXT Huck Valve manages the limitations of typical bottoming control systems. The MXT Huck Valve has speed sensitive bottoming control, by incorporating a pressure sensitive valving mechanism. This allows for both high entry speeds and low entry speeds effectively. MXT Huck Valve equipped forks allows the set-up to be plusher while not sacrificing the overall control of the fork.

Prototypes were made, dyno tested, and put to the track for real world testing. After excellent results from a diverse

group of riders on various terrains, the Lucky 4CS System entered production and is ready to ship today.



MXT PSF2 DUAL SPRING CONVERSION

The MXT PSF2 conversion features dual springs, dual cartridges, the Huck Valve, and is “drop-in ready” with no modifications required.

Fits: Honda CRF450 2015-2016 PSF2 forks Suzuki RMZ250 2016-2017MXT PSF2 features:

- Dual fork springs
- A redesigned Huck Valve
- New compression and rebound adjusters
- Quality machining to reduce friction
- DIY: This MXT PSF2 is designed to be drop in ready

Riders struggle to adjust stock PSF2 forks with traditional tuning, because the air system creates an inconsistent feel. As an example, a rider can become sensitive to the forks slightest internal pressure changes that occur during normal operation.

MXT engineered new internal components to improve rider experience and performance. The MXT PSF2 comes with new drop in dual cartridges, and dual coil springs. This unique solution provides maximum performance and consistent operation. Other features include ease of adjustment combined with the superior feel of the proven Huck Valve. The cartridges come standard with very broad and efficient leaf spring mid-valves, and sub-valve equipped compression adjusters. Finally, attention was given to better machining all around to reduce friction and to maximize weight savings over traditional spring forks.

Traditional stock bottoming control system is limited in that it can't manage multiple speeds or accelerations inside its travel. Stock systems can be adjusted to provide good control for either low or high-speed bottoming, but doing so limits the ability to absorb the other. The MXT Huck Valve manages the limitations of typical bottoming control systems. The Huck Valve has speed sensitive bottoming control, by incorporating a pressure sensitive valving mechanism. This allows for both high entry speeds and low entry speeds effectively. MXT Huck Valve equipped forks allows the set-up to be plusher while not sacrificing the overall control of the fork.

With research and development complete, the MXT PSF2 can offer a true "works" solution with the least amount of weight while taking advantage of the trusted fork spring operation.



MXT XPLR

The new MXT XPLR Cartridge System (XPLR) is the result of innovative engineering and a commitment to bring riders the best value in the suspension market. Major enhancements include:

- 1.5 pounds lighter than a stock 4CS fork
- Huck Valve
- Leaf Spring Midvalve
- Dual cartridges
- DIY: This XPLR is drop in ready

The stock WP XPLR fork is a very low cost design that offers riders very soft suspension. In fact, riders who are more aggressive and attempt to push the stock forks at a higher than trail tour pace – find the forks too soft, unpredictable and easy to bottom. Due to the low cost design its very challenging to achieve a set-up that is firm enough for race pace, or even aggressive trail riding and yet soft enough to be comfortable. For this reason, we set out to develop a fork kit that would solve the issues by adding dual compression and rebound cartridges. These dual cartridges distribute valving equally between the both forks. Each side also has leaf spring midvalves, optimized pressure balance, and provides a broad performance profile for riders who expect a plush ride while maintaining excellent traction and control.

Traditional stock bottoming control system is limited in that it can't manage multiple speeds or accelerations inside its travel. Stock systems can be adjusted to provide good control for either low or high-speed bottoming, but doing so limits the ability to absorb the other. The MXT Huck Valve manages the limitations of typical bottoming control systems. The Huck Valve has speed sensitive bottoming control, by incorporating a pressure sensitive valving mechanism. This allows for both high entry speeds and low entry speeds effectively. MXT Huck

Valve equipped forks allows the set-up to be plusher while not sacrificing the overall control of the fork.

Bottom line, if you are looking for stronger suspension and better performance in the trails, this is one upgrade worth taking advantage of.



N2dirt Works Shock with X-trig Adjuster and linkage

2015.5+ WP Works Shock Kit

N2Dirt shim settings rebuilt with ultra light racing oil on the Vacuum shock Bleeder.

X-trig Preload adjuster sold exclusively

MX-Tech 62mm TANK with 7075 Domed piston (Black, Blue, or Orange)

MX-Tech Triple Compression Adjuster (Blue, Orange, or Gunmetal)

Ultra Low friction DU piston band

Relay Arm chassis Knuckle with bearings and seals

High performance light Shock Spring



Shock Overhaul/Rebuild

The shock is completely disassembled, ultrasonic cleaned and inspected. Worn parts are replaced, damaged shims are replaced in stock configurations (standard settings are retained). The shock is then reassembled using genuine parts and high quality racing shock oil.



Shock Revalve

Please fill out our rider data sheet ([click insert link](#)) to determine what needs to be done, the rear shock is completely disassembled, cleaned, and inspected. Based upon the rider's needs, the damping system is modified, and the shock reassembled using genuine parts and high quality racing shock

oil.



Suspension Testing/Tuning

Onsite

N2dirt crew can meet at Southern California tracks to help riders who have purchased a fork and shock revalve. We will provide ride height settings along with clicker adjustment to teach riders how to customize their suspension to meet their needs of changing conditions and obstacles.

Price TBD. Contact us as we frequently attend race events and can assist you.



WP TRIPLE COMPRESSION ADJUSTER

The MX-TECH WP 3 Way compression adjuster:

It features 3 independent adjustments to the following circuits.

LSB:20 Clicks Standard Adjustment is 5 clicks out. This stands for Low Speed Bypass. The Low Speed Bypass, adjusts the amount of fluid pressure that can bypass past the adjustment circuits. It has the effect of delaying the speed at which the MSC comes into effect and makes the shocks action more loose and free in both directions.

MSC:20 Clicks Standard adjustment is 12 Clicks out. This stands for Mid-speed compression. Inspired by and designed around Enzo Racing's (Ross Maeda) system. The Mid Speed compression regulates a sub valve which reduces or increases the amount of pressure that goes through the stiffer main compression valve. It has a primary effect on chassis pitch and response to large g-loads and higher speed shaft movements.

LSR:10 Clicks Standard Adjustment is 5 Clicks. This stands for Low-Speed rebound. We used 3 letter acronyms, had we used 4 we would have choosing ULSR. Or Ultra low speed rebound. It is reducing the force created by the rod charge, and has a ability to calm the shock in large rolling undulations at corner entry or at times when the chassis is partially unweighted (Such as hardpack corner entry), without having to over adjust the shocks primary clevis located traditional rebound adjuster. This creates a calmer more planted chassis without a sacrifice in the shocks ability to follow the ground while under throttle in low traction.

We recommend the following adjustment procedure. To optimize

the adjustments. Start with the LSB. Typically this is the least adjusted circuit, and in many ways has the greatest impact on overall feel. We recommend that use it to create the feeling of movement that you are looking for based on your conditions, it is not uncommon to end up with the adjuster at 1-2 clicks out in some MX conditions, and offroad and 2 stroke riders may end up at 15. Either way once the "gross" feel is achieved use the MSC speed adjuster to adjust for the feel in larger faster movements that your after. You will turn it frequently, and you will see that the majority of your riding adjustments will be done to this circuit after you initially set the LSB.

The LSR is the last adjuster to tune. Its effect is somewhat elusive in certain conditions. Until you recognize the symptoms and response I recommend you wait until you are riding a slick hard surface with bumps and undulations. Pay attention to the adjusters effect at corner entry and the feel of the bike as you brake or drop off a ledge. Adding LSR will slow the lift and give the rider a calmer feeling bike. Once you notice the effect tuning this circuit it will become more intuitive. You may be asking yourself why would I not just run it full in? The effect can still limit traction and can increase the shocks tendency to pack up when on the gas over larger rollers. So like all adjusters there is a sweet spot that balances the positive and negative aspects.

Fitment:

KTM offroad linkage models 2011-2016 125-505

PDS models 2012-2016

Husky 2014-2016 125-450