TRACKS

SEPTEMBER 30, 2017

In this issue...

Upcoming Events...

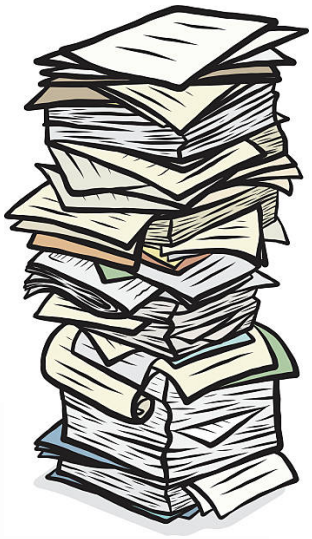
Bacon2Margaritaville- October 8, 2017

NH Run- October 22, 2017

Fall Meeting- October 28, 2017

Smileage Section

Sometimes a smile can take you further than a tank of gas...



Since I didn't receive any submissions for this month's Smileage Section, I figured I would throw in a few of my own submissions.

My first is a huge thank you to Cassandra for her submissions!! She has been wonderful about taking photos and writing up the happenings of either a wrenchfest or trail run. Having material, other than my own, makes the newsletter that much more fun for you all to read and for me to put together. I wanted to make sure that my appreciation is known. So, thank you for everything Cassandra!! ☺ ☺ ☺ ☺ ☺

I didn't include the Great American Jeep Rally in last month's "Upcoming Events." However, many of you knew about this amazing event.

From the first rally that I ever attended and volunteered at in 2012, I was hooked. It's about SO MUCH more than all the Jeeps and Jeeple that show up! It's about giving back, because it's all for charity! ☺ The 2017 beneficiaries were *Homes for Our Troops* and *the Pink Angels*.

Thank you Josh Schwalb, Jeni Schwalb, Beth Savard, and Dave Savard for all your hard work organizing this event!! It was another wonderful year because of your dedication and efforts!

Randy's Axle Swap

September 2, 2017

By, Cassandra Meads

The day started at 8 am. By the time I got there, the guys had already begun disassembling things. Kurt and Randy were on the front, Mark StGermain (MDSRACING398) and Dan Beyea (BlackNBlue-ISH) were on the back with Dave Savard (Modeler) & Bob (BlackKnight).

By 10:30 am, all guys with wrench in hand, both axles were out and bump stops were being removed. As the axles were being rolled out of the way, dibs were called by three people.

By 11:30 am, the rear axle was in place. They had the engine hoist rigged up in case the jeep needed to be lifted. I was waiting, with my camera in video mode, to capture the lifting, but they managed to get things in place without it, so no video of that.

With Dan in charge of applying anti-seize, all bolts were put back in place and work began on the front. After a quick lunch break, the work resumed. Thank you for lunch Kurt! With the second bay cleared of Randy's sh.... stuff, Dan pulled his rig in, to start work on control arms, while Mark and Randy finished the front axle. With the brakes reassembled and line bled, Randy was ready to put on his new 37's.

Meanwhile, Dave and Dan worked on rebuilding the Johnny Joint on the first control arm. One down, three to go. Dave even installed his rebuilt front drive shaft in no time at all.

Some final adjustments were made to Randy's control arm and some measurements were taken for his new Tom Woods drive shaft. And with that, Randy's build was completed for the day.


Jeep

QUICK AXLE ID CHART

FOUND AND BORROWED FROM ONLINE.

Dana 30

Dana 35

Dana 44

Dana 60

Dana 70

Dana 80

Ford 7.5

Ford 8.8

Ford 9.75, 10.25, 10.5

Chrysler 8.25

Chrysler 9.25

GM 10-Bolt

GM Car 12-Bolt

GM Truck 12-Bolt

GM 14-Bolt

What is it?

Written by, Unknown
Submitted by, Josh Schwalb

4-Hi	All Wheel Drive for mild off-road conditions allows higher speed driving. 4H can also be used on sandy conditions such as beaches where higher speeds result in a desired flotation effect.
4-Low	All Wheel drive for low speed, more extreme conditions requiring maximum power and traction. Low range can also be used in a higher gear on sandy terrain such as a beach.
Arm	Found on all IFS suspensions listed in this catalog except for the Ford TTB. There's is one upper and one lower arm on each side. They have a ball joint on the outboard end and connect to the frame on the inboard end.
All-Wheel Drive	In this document, All-wheel drive will be used to describe a system which is similar to part-time four-wheel drive, but has no or limited control over it's "modes" of operation. All-wheel drive is a common safety feature on cars, mini vans and sport-utility vehicles.
Antilock Brakes	Electronically controlled, sensor-actuated braking system designed to minimize or eliminate brake locking. RWAL (real antilock) is standard on most pickups. 4WAL (four-wheel antilock) is usually offered as a factory option, and is sometimes standard. Four-channel antilock indicates that each wheel has its own sensor.
Approach Angle	Formed by drawing a line from the front tire's contact patch to the tip of the front bumper, and by drawing a line from the rear tire's contact patch to the tip of the rear bumper. The shorter the overhand, the greater the angle, and the more maneuverable in uneven terrain.
Articulation	The suspension's ability to follow varying terrain keeping all four wheels on the ground in a cross-axle situation.
Auto Lockers	Differentials that lock automatically when traction is required and unlock when variable rotation of the wheels on a hard surface takes place. When in operation, power is equally split.
Axle Ratio	Number of driveshaft revolutions per revolution of the axle shafts. This can be calculated by dividing the number of teeth on the axle ring gear by the number of teeth on the pinion gear.

Axle	This term has two or more meanings. In its simplest form, an axle is a rotating metal shaft which drives a wheel. This is also called a shaft or axle shaft. It may be inside housing, or posed such as a CV axle (Referring to the Constant Velocity joints on both ends) on front – wheel drive cars. An axle may only provide rotating force to drive a wheel, or may also carry some of the weight of the vehicle. It is connected to a differential. Axle is also used as a general term referring to axle housing. For example, someone speaking about the "rear axle" is talking about the axle housing, differential, axle shafts and sometimes the brakes.
Brake Horsepower	A measure of power per mile found more often in European specs. Calculated: rpm x torque (lb-ft) / 5,250
Break Over	The angle at which you can clear an obstacle without "hanging up" between the axles, this is the point at which the underside of the vehicle would drag.
Bump Steer	Caused by a number of alignment problems, bump steer is when a vehicle darts or wanders excessively when operated on a less than ideal driving surface… in other words, it takes a concentrated effort to keep the vehicle in a straight line.
Camber	The inward or outward tilt of the front tires as viewed from the front. Inward tilt is negative, outward tilt is positive. Camber is used to distribute load across the entire tread. Improper camber makes the tire wear on one edge, and causes the vehicle to pill to the side that had the most positive camber.
Caster	The fore or aft slope of the steering axis. The steering axis is a line drawn through the upper and lower ball joints of the knuckle. Positive caster is when the bottom of the steering axis line is in front of the tire's contact patch. Zero caster is when the steering axis is at 0 degrees. Positive caster ensures good stability, helps maintain straight-ahead direction and promotes steering wheel self-centering. Too much positive caster causes hard steering, excessive road shock and shimmy.
Canter Link	A center link is found on IFS vehicle that have upper and lower control arms. It is a piece of steering linkage that connects the pitman and idler arms. A tie rod connects to each end of the center link. On some lifted trucks, the Original Equipment (OE) center link is replaced by a "dropped" center link.
Center Differentials	A full-time 4WD vehicle needs a centre differential to prevent wind up between front and rear axles – this being caused by the differential rotational speed on opposing wheels caused by corning. In these vehicles the differential lock locks the front and rear drop shafts when going off-road.

CNC	Stands for “Computerized Numerical Control” Term describes a type of control system used on a piece of manufacturing equipment. CNC machines offer unsuppressed accuracy and repeatability.
Compression Travel	A measurement of the amount the suspension will compress before it bottoms-out against its travel stop. This travel stop is also called a “bump stop” and “jounce stop”
Computerized Numerical Control	A type of control system used on a piece of manufacturing equipment. CNC machines offer unsurpassed accuracy and repeatability
Control Arm	Control arms, also called “A-arms” because of their shape, are found on all IFS suspensions listed in this catalog expect for the Ford TTB. There is one upper and one lower arm on each side. They have a ball joint on the outboard end and a connect to the frame on the inboard end.
CSS	Stands for Center link Stabilizing System. A dropped center link tends to pivot fore and aft excessively when turning force is applied. The CSS uses one or two links to tie the center link to a cross member and prevent this excessive movement.
CV Axle	Constant Velocity axle. With a control arm style IFS, they are the rubber or plastic booted axle shaft assemblies (one per side) that bolt to the differential housing flange on the inboard end, and mate to the hub / knuckle on the outboard end.
CVR	Constant Voltage Regulator
Departure Angle	Formed by drawing a line from the front tire’s contact patch to the tip of the front bumper, and by drawing a line from the rear tire’s contact patch to the tip of the rear bumper. The shorter the overhand, the greater the angle and the more maneuverable in uneven terrain.
Differential	A device that takes input from one rotating shaft, and distributes the energy between two output shafts. These are found in all automobiles, two or four-wheel drive. Its purpose is to apply driving force to the wheels, and allow for different rotational speeds while the vehicle is turning. Differentials are found axle housings, transfer cases and in transmissions (transaxles – almost all front-wheel drive cars.
DOM	Stands for Drawn Over Mandrel. The term specifies a certain type of tubular steel that has exceptional strength, forming, and welding characteristics.

I hope you enjoyed this issue of Tracks. More importantly, I hope you're looking forward to the next issue.

Thanks,

Shannon

Please email article submissions and photos (Drobox links work, too) to: RedAnimalTJ@yahoo.com

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