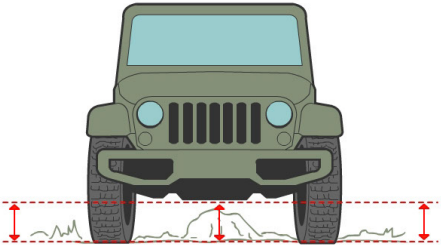
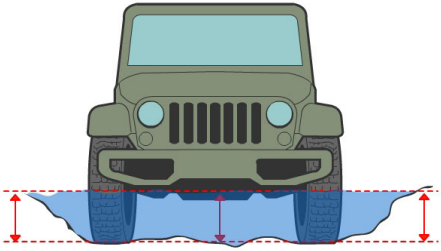
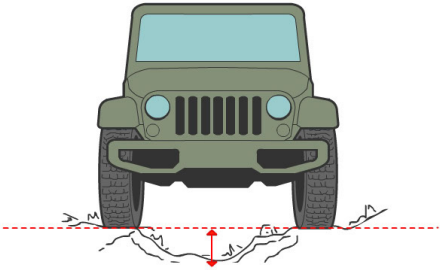


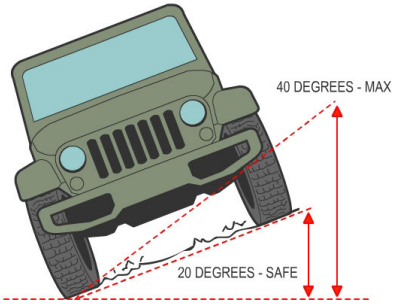
MAXIMUM GROUND / OBSTACLE CLEARANCE



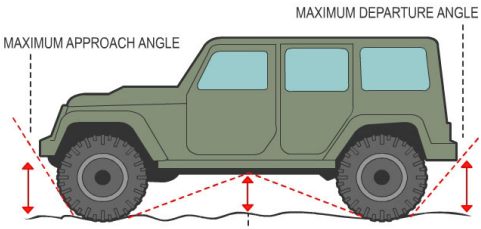
SAFE FORDING CLEARANCE



STRADDLE RUTS AND GULLYS

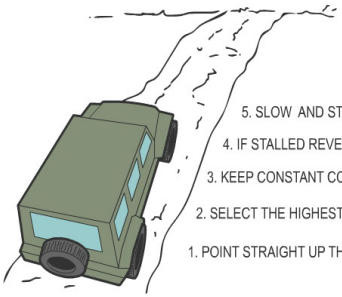


ROLL OVER ANGLE



MAXIMUM BREAK OVER ANGLE

IF CLEARANCE IS A PROBLEM ENTER GULLYS DIAGONALLY



5. SLOW AND STOP AT THE TOP
4. IF STALLED REVERSE BACK DOWN
3. KEEP CONSTANT CONTROLLED SPEED
2. SELECT THE HIGHEST POSSIBLE GEAR
1. POINT STRAIGHT UP THE HILL

1. POINT STRAIGHT DOWN THE HILL
2. SELECT THE LOWEST POSSIBLE GEAR
3. KEEP SLOW CONTROLLED SPEED
4. FEATHER THE BRAKE WHEN NEEDED
5. LET THE ENGINE DO THE BREAKING
6. AVOID THE CLUTCH IN A MANUAL

DRIVING IN SAND

The most important aspect of driving on sand is your tire's flotation. The more tread you have touching the sand, the better. You will need to air down your tires to some extent in order in increase your tire's footprint. How much depends on your vehicle and the type of sand in question. Refer to page 14 for pressure recommendations.

All-terrain tires tend to perform better in sand, but wide-profile mud-terrain tires can also work to your advantage and even perform like paddle tires at the correct pressure. While the right tires do matter, there is quite a bit of strategy when it comes to driving in sand. Air pressure, momentum and throttle application are the fundamentals that will ultimately keep you moving.

Soft, loose sand robs the power and traction from your 4X4 vehicle. So it's imperative to keep steady forward momentum to lessen the chance of getting stuck. There are so many variations of sand out there that it's always a good idea to check out the area by foot. If your feet become completely submerged, imagine how much your half-ton rig will sink. Regardless, if you do plan to drive on sand you should always remember the following:

Once your vehicle is in motion, ride at the highest comfortable gear to maintain momentum. When you do need to stop, it's important to park your vehicle in a spot where you can easily gain momentum, such as a slight downhill slope.

Sharp, sudden turns may cause your tires to dig deep into the sand. If forward progress ceases, DO NOT apply more throttle. This will only worsen the situation by causing your tires to dig down deeper into the sand. If you lose momentum, try to back up your rig gently. If your tires start to spin, it's time to get your shovel.

If your vehicle gets stuck, you'll have to dig out around the wheels. Hub caps, Frisbees or your spotter's hat can serve as makeshift shovels if you've forgotten yours. If there's water near, wet the sand in front of the tires to provide firmer terrain to grab onto. You can even place your vehicle's floor mats under the tires for traction.

DRIVING IN MUD

Rather than trying to prove that you can do it, take a step back, analyze the situation and ask yourself if you really need to do it. If the answer is yes, then it's time to do a bit of detective work to ensure that your rig is actually going to make it to the other side.

TERRAIN

Are there tracks going in? And are there tracks coming out? If there are only tracks going in, then someone didn't make it, and chances are you won't either. You'll never know how deep it is until you check. Test the depth with a stick, shovel or anything you can get your hands on before entering.

GETTING TO THE OTHER SIDE

So this is it. You've taken the proper precautions, decided you and your vehicle are prepared to make it and are ready to let the mud fly. But in order to avoid a few laughs from onlookers, keep in mind the following:

Lock 'em if you got 'em.

Engage both lockers and 4WD before entering mud.

Avoid ruts when possible. Driving in existing ruts or tracks will only reduce your vehicle's ground clearance and increase your chances of getting stuck.

Enter the mud with a good amount of momentum, and use light throttle to avoid wheel spin.

Pick a straight line and commit. You need to live with your decision or live with getting stuck.

DO NOT brake. This will only kill momentum.

If you feel yourself losing traction, turn your steering wheel back and forth quickly, which will add the tire's cleated sidewall to the traction equation. The sidewalls will act like "paddles" that use the sides of the trench the tire has sunk into for extra traction.

POST-MUD BATH

If you make a mess, you must be prepared to clean it up. Check your differentials, transmission, transfer case and brakes to make sure nothing was displaced after driving though deep, thick mud. After a bit of mudslinging, it's always important to thoroughly clean your wheels, undercarriage and brakes with a pressure hose.

BULAWAYO												
560	CHIMANIMANI											
484	225	CHIREDZI										
164	461	385	GWERU									
439	416	495	275	HARARE								
337	896	771	501	776	HWANGE							
804	781	860	640	365	557	KARIBA						
226	523	447	62	213	563	578	KWEKWE					
513	342	523	349	74	850	439	287	MARONDERA				
282	278	203	183	293	617	658	345	488	MASVINGO			
597	151	325	480	265	906	630	478	191	297	MUTARE		
686	258	432	547	272	949	637	485	198	404	107	NYANGA	
437	997	991	601	876	102	1241	663	950	719	1016	1123	VIC FALLS

BULAWAYO > HARARE	6+ HRS	BULAWAYO > BEITBRIDGE	5+ HRS	BULAWAYO > GONAREZHOU	8.3+ HRS
HARARE > GONAREZHOU	8+ HRS	HARARE > KARIBA	6+ HRS	HARARE > NYANGA	5+ HRS

CAR SIZE	TYPE	RANGE	OPTIMAL
MEDIUM	STANDARD	30-40 PSI	36 PSI
	SPORT	34-42 PSI	40 PSI
	WAGON	32-40 PSI	38 PSI
	UTILITY	32-44 PSI	40 PSI
LARGE	STANDARD	36-42 PSI	38 PSI
	SPORT	36-50 PSI	44 PSI
	WAGON	38-46 PSI	42 PSI
	UTILITY	40-50 PSI	44 PSI

COOLANT	
BATTERY TERMINALS	
JACK, WHEEL SPANNER	
TYRE PRESSURE	
SPARE TYRE	
TOOL KIT	