

SLICAST

Caster Camber adjustable A-Arms for snowmobiles

A-Arm Installation Instructions

Ski Doo 2008-14 XP, XR, XS Chassis:

MXZ: RS, X-RS, X, TNT, Adrenaline, Sport

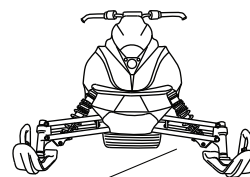
Renegade: X, Adrenaline, Sport

GSX: LE, SE, Sport

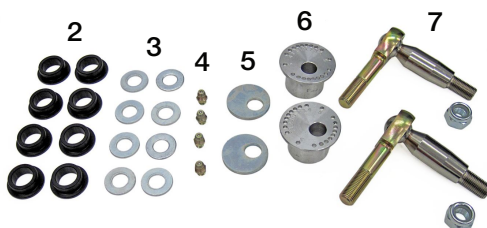
Determine Left and Right arm



Make sure grease fittings are pointed down



Decals
need to be visible and right side up
when looking at the front of the sled



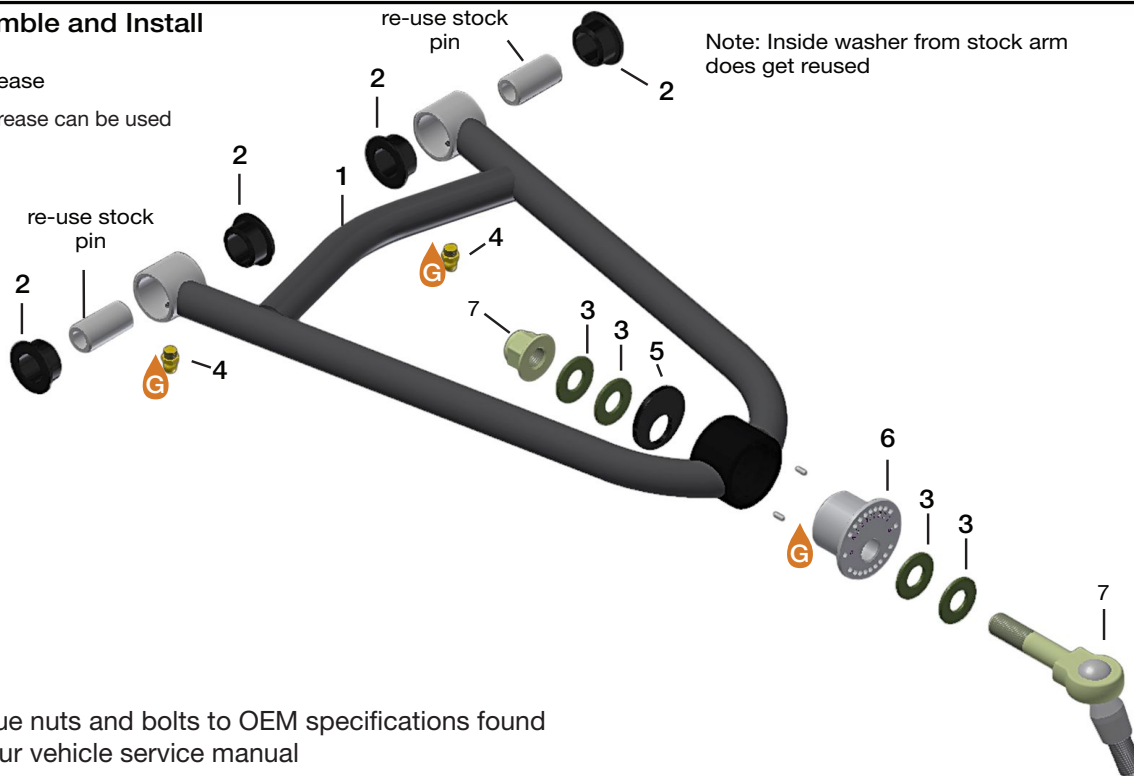
Item	Description	Qty
1	A-Arm	2
2	Mount Bushings	8
3	Camber Spacers	8
4	Grease Fitting	4
5	Caster Support Plate	2
6	Adapter Sleeve	2
7	Ball Joint w/ nut	2

Assemble and Install



Grease

*Any grease can be used



Torque nuts and bolts to OEM specifications found
in your vehicle service manual

902-81-001 | Rev 2 | 6/9/2015



308 Peruville Rd. Freeville, NY 13068

If in doubt, just ask !

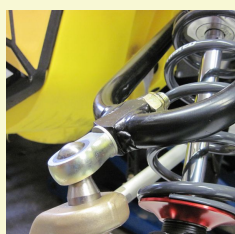
info@hygearsuspension.com

607.533.7434

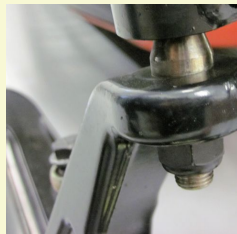
Installation Instructions and Tips

Mounting Points

Refer to the attached assembly diagram.



XP/XR



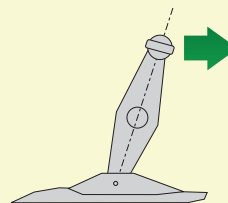
XS

Note: Inside washers from stock a-arms are reused
Ball Joint Removal Tool (part #64-99-030) may be needed

Recommended Starting Position

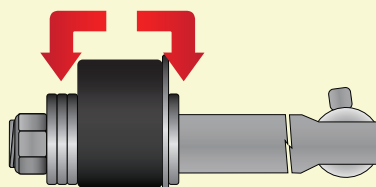
This set-up is the equivalent of Ski Doo's RAS 2 suspension
See bottom of page for settings equal to stock location

Caster: Position #4



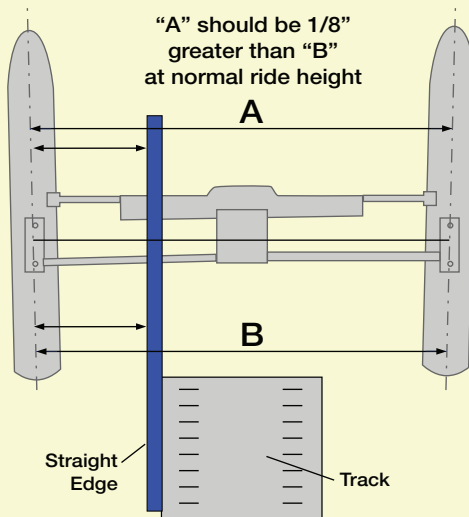
Note: Rotate to position 4, moving the upper ball joint toward the rear of the sled

**Camber: 3 washers on the inside
1 washer on the ball joint side**



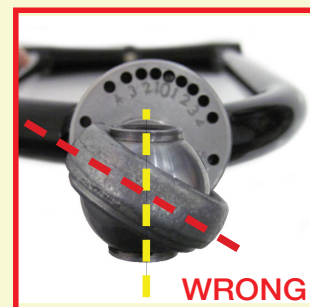
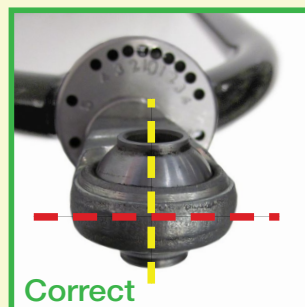
Check Toe

Toe should be checked after adjusting camber. Take measurements as shown in the diagram below. It is better to err on the side of toe out



Ball Joint Installation

The ball joints should be centered in their travel. Make sure ball joints are level when tightening the ball joint assembly after making a caster or camber adjustment.



Note: Ball Joint will remain loose in tapered socket until tightened

Set-Up:	Equal to Stock*	Equal to RAS 2
Caster:	Position #0	Position #4
Camber:	2 washers inside 2 on ball joint side	3 washers inside 1 on ball joint side
Ball Joint:	Std Height	Extended Height

*NOTE: With Standard Height Ball Joint the Slicast system is used on many different vehicles. The use of Position "5" at full offset camber positions may cause the top of the spindle to contact the Slicast cam when the suspension is fully compressed. If in doubt, set caster and camber to the desired position, remove the spring from the shock, and fully cycle the suspension to confirm there is no contact between components. This note does not apply to extended height ball joint.

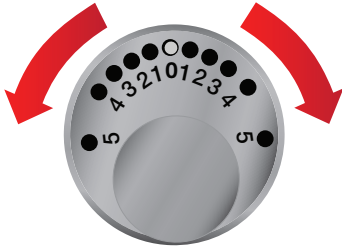
HOW SLICAST WORKS

Adjusting Caster and Camber using the Slicast System

Adjust Caster

The simple caster adjustment system is easy to use and has 11 marked settings. Setting 0 is the same as stock. Turn the cam and rotate to adjust caster position

Rotate Cam to change caster



Start at 0 - equal to stock setting
Set at 4 - equal to RAS 2 suspension

How caster adjustments affect steering

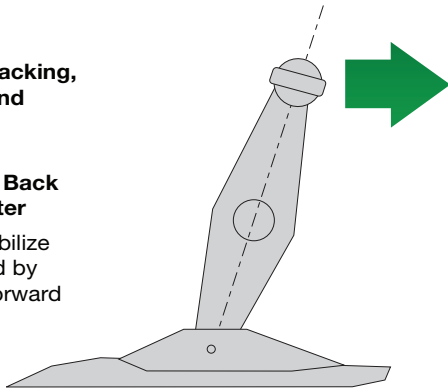
Problem:

**Darting, Poor tracking,
Twitchy Front End**

The Fix:

**Move Ball Joint Back
for positive caster**

This will help stabilize
steering at speed by
moving the ski forward



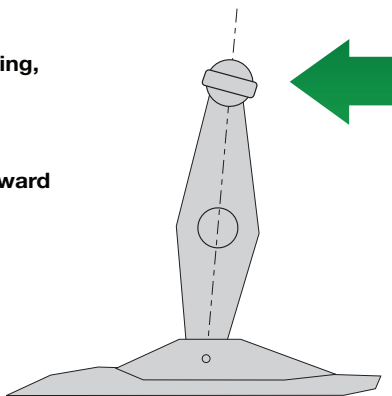
Problem:

**Unresponsive Steering,
Heavy Feel**

The Fix:

**Move Ball Joint Forward
for negative caster**

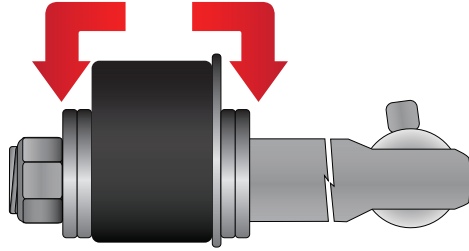
this will move the ski
back making the feel
lighter and quicker



Adjust Camber

Camber is adjustable by changing the orientation of spacers on the balljoint stud. Stock camber can be achieved by orienting an equal number of spacers on either side of the cam adjuster. Spacers can be moved one at a time to change camber. Move inside for negative camber or outside for positive camber.

Move spacers to change camber



2 spacers on each side - equal to stock setting
3 inside, 1 outside - equal to RAS 2 suspension

How camber adjustments affect steering

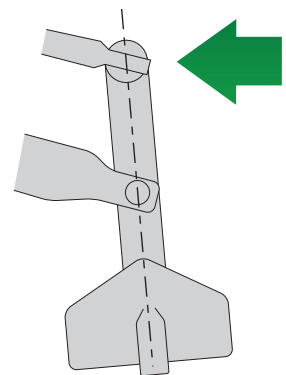
Problem:

**Difficulty Turning,
Tendency to Understeer**

The Fix:

**Move Ball Joint In
for negative camber**

This will increase the side
bite of the skis which will
improve cornering and
reduce understeer



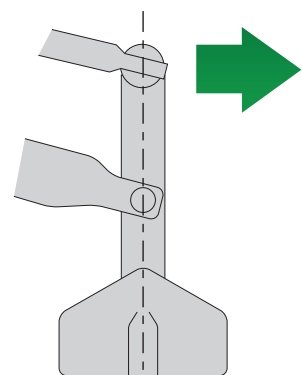
Problem:

**Overly Aggressive
Steering**

The Fix:

**Move Ball Joint Out
for positive camber**

This will decrease the side
bite of the skis, which will
improve tracking and
reduce darting



* when making large adjustment to camber settings it may be necessary to check and re-adjust toe.