ridetech

INSTALLATION INSTRUCTIONS

Part # 11009303

A/F/X Tall Spindle Kit

1964-1972 GM A-Body
1967-1969 GM F-Body
1968-1974 GM X-Body

www.ridetech.com
812.482.2932

Please Read And Understand All Instructions And Warnings Prior To The Installation Of This Product.

Congratulations on your new Ridetech product! It's an honor that you've selected the Ridetech brand to upgrade your ride. Our products are developed around quality and performance without compromise. We're confident you'll have many years (and miles) of pure driving enjoyment.
Thank you for choosing Ridetech!

Road Map

COMPONENTS		
Part #	**Description**	**Qty**
11009304	Tall Spindles - Pair	1
90002743	3/4"-20 Spindle Nut Kit	1
Hardware KIT: 99010174		
99621001	5/8"-18 X 1" BOLT	2
99501071	1/2"-20 x 3" FSCS	4
99501054	1/2"-20 x 2 1/2" FSCS	2
99502002	1/2"-20 Nylok Nut	6
99502005	1/2"-20 x 2" Bolt	2
99952003	1/8" x 1 1/2" Cotter Pins	4

PRE-INSTALLATION NOTES

COMPATIBILITY

These spindles are a direct replacement for the OEM disc brake spindles. If your vehicle currently has drum brakes, you will need to convert it to disc brakes. These spindles will accept any brake kit that is designed for the OEM disc brake spindles.

OEM CALIPER BRACKET

These spindles are designed around stock disc brake spindles and will accept any disc brake set up designed for those. We have discovered that in some cases it may be necessary to trim the bottom corner of the stamped ¼" steel caliper bracket that holds the caliper (see below). It is an area that is not stressed and will not cause any loss of strength. Trim only enough to make the caliper bracket clear the spindle.

PRE-INSTALLATION NOTES

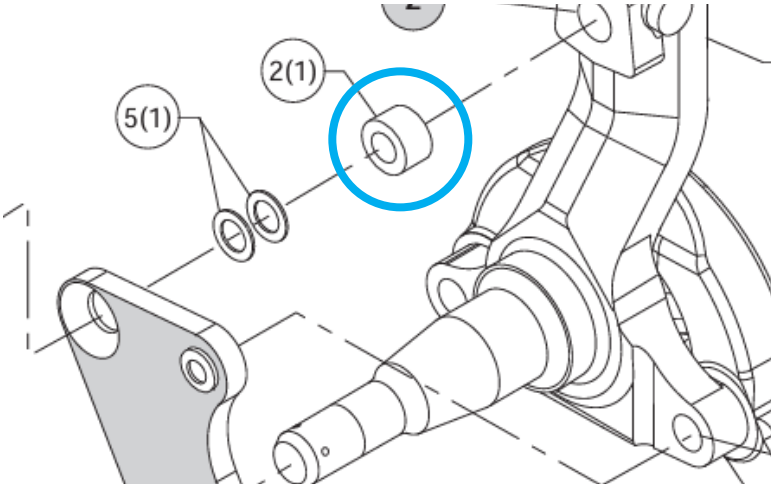
WILWOOD DISC BRAKE KITS

The mounting bosses on your new Ridetech spindles were designed to match the factory DISC brake spindles.
If you are currently running a Wilwood disc brake kit on a factory DRUM brake spindle, you may encounter a fitment issue when attempting to install the same brake kit on the Ridetech spindle.

The Wilwood kit includes a bracket spacer (one per side) for compatibility with a disc brake spindle. If the brake kit was initially installed on a drum brake spindle, this spacer is often lost or discarded. The spacer is required for proper installation of the Wilwood brake kit onto the Ridetech spindle.

If you no longer have these spacers, you may purchase replacements from Wilwood (see below).

Wilwood Part # 300-15524



Disassembly

1. Raise the vehicle to a safe and comfortable working height. Allow the lower control arms to hang freely and remove the wheels.

NOTE: If you are only replacing the spindle, leave the shock in place to prevent the coil spring from coming out.

2. Remove the brake caliper. If you have a drum brake car, the drum will need to be removed to access the steering arm hardware.

⚠ **CAUTION:** When the brake caliper is removed, do not allow it to hang unsupported from the brake hose. Use a piece of wire or zip tie to support the caliper to prevent damage to the line.

3. Remove the outer tie rod end from the knuckle, followed by removing the hub/disc assembly.

4. Place a jack under the spring seat of the lower control arm and raise until the arm is supported.

⚠ **CAUTION:** The control arm must remain supported during removal and installation of the spindle in order to maintain the position of the arm and spring.

5. Remove the cotter pins from the upper and lower ball joint studs.

6. Loosen each of the ball joint castle nuts a couple turns.

7. Use a ball joint separator or gently tap the knuckle to dislodge the ball joint stems.

8. Remove the castle nut on the upper and lower ball joints.

9. Raise the upper control arm to disengage the ball joint from the knuckle.

10. Remove the knuckle from the lower ball joint stud.

11. Inspect the tie rod ends and ball joints for wear/damage and replace if necessary.

Installation

12. The steering arm will bolt to the BOTTOM set of holes on the Ridetech spindle using the supplied 1/2" hardware.
The mounting bosses of the steering arm are 2 different thicknesses. The thick boss will use a 1/2"-20 x 3" flat socket cap screw. The thin boss will use a 1/2"-20 x 2 1/2" flat socket cap screw.

NOTE: Some steering arms have 7/16" mounting holes. They will need to be drilled out using a 1/2" drill bit.

13. Align the steering arm mounting holes with the bottom 2 holes of the spindle. Insert the 3" long bolt through the thick boss and the 2 1/2" long bolt through the thin boss. Insert the bolts from the front of the spindle.

14. Slide the steering arm onto the bolts. Install a 1/2"-20 nylok nut on each bolt.

The steering arm hardware will need to be torqued to **100 ft-lbs**, but it is easier to torque with the spindle installed on the car.

Figure 1

Figure 2

15. Attach the spindles to the control arms. Torque the ball joint and tie rod nuts to the following:

Lower Ball Joint: **65 ft-lbs** (tighten to line up cotter pin)
Upper Ball Joint: **50 ft-lbs** (tighten to line up cotter pin)
Tie Rod End: **35 ft-lbs** (tighten to line up cotter pin)

16. If installing a new disc brake kit, refer to the manufacturer's instructions.

17. If reinstalling the OEM disc brakes, torque the upper 5/8"-18 caliper bracket bolt to **120 ft-lbs**, and the lower 1/2"-20 bolt to **100 ft-lbs**.

REMINDER: As outlined on Page 3, you may have to trim the lower corner of the OEM caliper bracket to clear the spindle.

18. Wheel Bearing Tightening:

While holding the rotor, torque the nut to 12 ft-lbs. Back off the nut one flat and insert the cotter pin. If the slot and pin hole don't align, back off the nut an additional half flat or less as required to insert the pin. Bend the ends of the cotter pin and replace the dust cap.

NOTE: Bearings should have zero preload and .001" to .008" of end movement. On a disc brake with the caliper removed, it's normal to have a slight amount of play detectable in the bearing.

19. Double check all hardware before driving.

⚠ **CAUTION: Be sure to pump the brake pedal before driving to reset the brake pads to the rotor. Bleed the brake system if you had the calipers removed.**

20. Have the vehicle aligned.

Suggested Alignment Specs For Street Driving

Camber: -.5 Degrees

Caster: +3.0 to +5.0 Degrees

Toe: 1/16" to 1/8" Toe In

LOCATION	TORQUE SPEC
1/2"-20 Steering Arm Bolts	100 ft-lbs
Lower Ball Joint Castle Nuts	65 ft-lbs
Upper Ball Joint Castle Nuts	50 ft-lbs
Tie Rod End Castle Nuts	35 ft-lbs
OEM Caliper Bracket Upper 5/8"-18 Bolts	120 ft-lbs
OEM Caliper Bracket Lower 1/2"-20 Bolts	100 ft-lbs
Spindle Castle Nut	12 ft-lbs