SURE STOP I INSTALLATION INSTRUCTIONS

1. Remove the existing brake line from the master cylinder. Determine if your master cylinder has 1/8" pipe thread or -3 AN threads. NOTE: The DPI Sure Stop is designed to use with 1/8" pipe thread on all four ports. The -3 AN fitting that is supplied with the kit is for use with Tilton type master cylinders. Using one of the fittings supplied, install your DPI Sure Stop recirculator directly onto the master cylinder. If clearance is a problem for mounting, you can remote mount your recirculator and use the bottom plugged hole to go back to the master cylinder, or if you need to hook up a brake gauge.

2. Connect the existing brake line from the calipers to the outlet side (to calipers) of the recirculator.

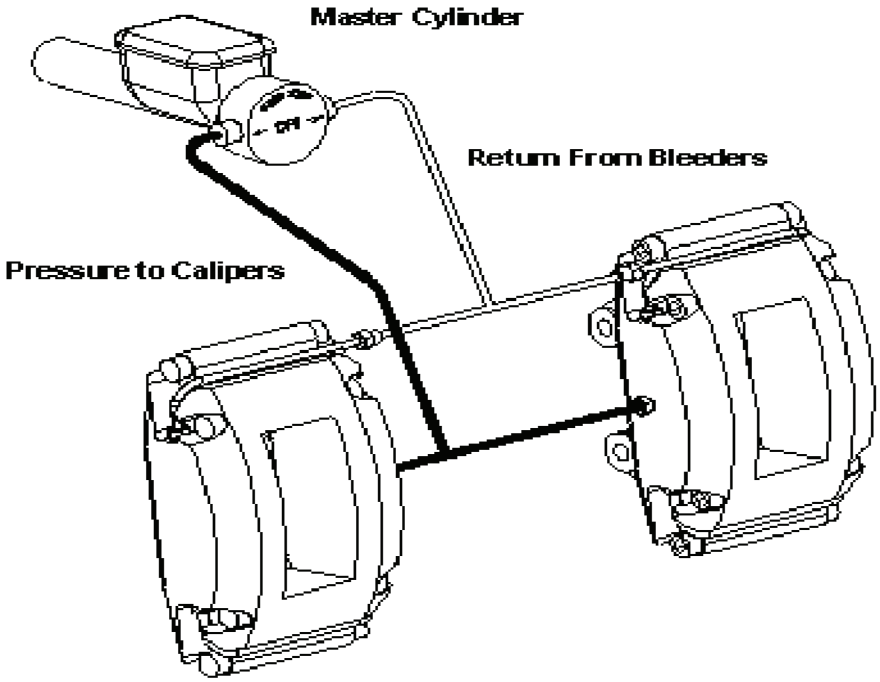
3. Remove the existing bleeder assembly for the calipers and install the new cross over tubes. You will need to install a new set of hard brake lines to the calipers. These will serve as the return lines for the brake fluid (see illustration) install a new flex line from the crossover tube to the hard line returning to the recirculator (return from bleeder). NOTE: DPI has cross-over tubes available for most calipers or we can custom make them to your specifications; See page 10.

4. Now you are ready to go! Just pump the brake pedal up and down several times. Your system should self-bleed. If the pedal is not firm, repeat until all the air is out of the system. See note below.

5. The bleed screw on the recirculator can be used to bleed the system, but the main purpose is for the use of a brake bias gauge for setup.

Thank you for purchasing our products and good luck racing! We hope the DPI Sure Stop along with all of our competition proven products will help you get to the winner circle.

Tech Note: If the system is dry, you may have to open the return line at the caliper crossover tube to help get the air out of the system. Do the same thing at the return port on the recirculator. Always start from the farthest point first.



1. Remove the existing brake line from the master cylinder. Determine if your master cylinder has 1/8" pipe thread or -3 AN threads. NOTE: The DPI Sure Stop II, Part A and Part B, are designed to use 1/8" pipe thread on all ports. The -3 AN fitting that is supplied with the kit is for use with Tilton type master cylinders. Using one of the fittings supplied, Install Part B on the rear master cylinder, then install Part A onto the front master cylinder. If clearance is a problem for mounting, you can remote mount your recirculator, however it has to be installed with 12" of the m/c and at the same height or lower.

2. Bridge the front and rear master cylinder reservoirs together using the plastic tube and fitting furnished, or use part# 2185 (optional dual reservoir). This allows the fluid to be transferred back to the rear master cylinder after it is returned through the system. Caution: if you are using plastic reservoirs, drill holes 11/32" diameter. DO NOT run the 1/8" pipe tap too deep. If the master cylinders are mounted close together it will be easier to loop the tube in front of the reservoir.

3. Connect Part B to the port marked (from rear m/c) onto Part A with the short steel tube provided. Connect Part B port marked (to rear calipers) to the rear calipers.

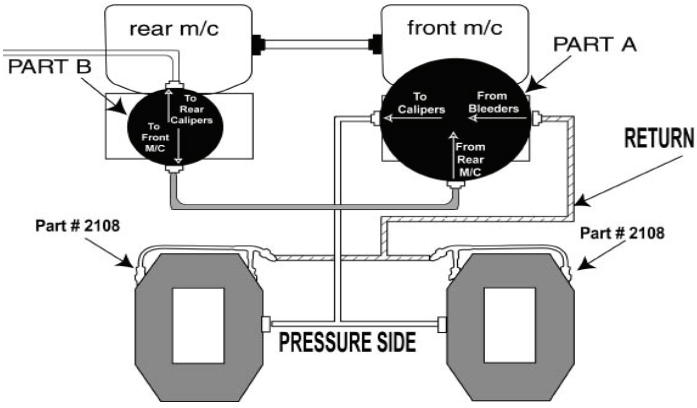
4. From Part A connect one line from the port marked (to caliper) to each front caliper, this is the pressure side (diagram 1). Optional installation for maximum cooling and recirculating benefits use part #2115, (diagram 2) to pressure feed the outer caliper halves. This is where the most heat is generated.

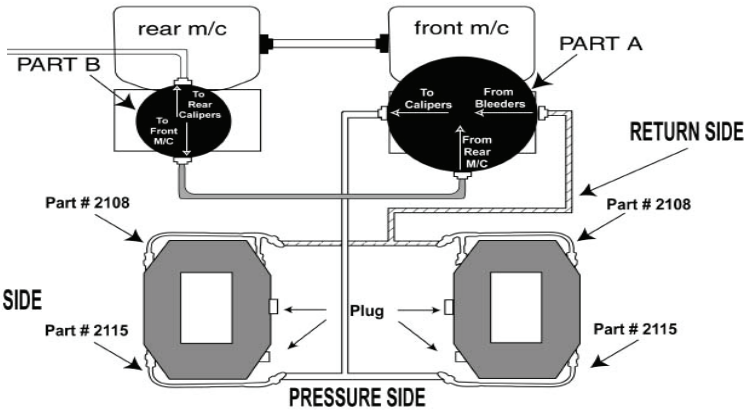
5. Connect one line from each caliper bleeder (recommended use part #2108 cross over tube) back to Part A port marked (from bleeders). This is the return side.

6. Fill the system with brake fluid. Pump the brake pedal. When the fluid begins to move, the system will start to bleed itself.

7. If you purchased the optional kill switch with your Sure Stop II Brake Recirculator, screw the switch into the top port on Part A. Wire from the ignition switch to the positive side of coil. DO NOT run other accessories or alternator on this switch. When the brake pressure rises approximately 200 psi above normal operating pressure, the ignition will shut off, when the pressure is reduced, the ignition will be reconnected. If it becomes necessary to change the switch setting, loosen the nut and rotate the top (out for higher, in for lower). Move in small increments of 1/8" at a time.

Part #: DPI2160





Recommended Use Of Gear Oil For The Platinum Track Differential (ONLY):

- Joe Gibbs Performance Gear Oil - 75/110
- Redline Gear Oil - 75/90
- Redline Gear Oil – 75/140
- Royal Purple Gear Oil – 75/140
- Kendall Gear Oil

Note: We do not recommend using Redline Shock Proof Oil or Mobil Gear Oil for the Platinum Track

- Please change oil after 250 laps
- Use DPI 1300 Fortifier: 1 bottle per 4 quarts of oil
- Use 4 quarts of oil for 9" and Q/C with a ½ in. vent
- This unit is not serviceable by the end user. DPI will service all units. Most of the time DPI has a 24 to 48 hour turn around.
- Recommended use of oil cooler with all differentials.

Items to check:

- **Axle engagement - axles need to be engaged a minimum of one inch. If run with less than one inch you could damage the unit.** The easiest way to check is to put white grease on the end of the axle spline. Put axle in housing and push in until flush with the drive plate. Then push in an additional 3/16". Now pull axle out. Measure the amount of spline engagement into the differential by how far the grease has moved up the spline. Minimum 1".

- With the platinum track you cannot use a lockup plug.

- 8.8 platinum must use c-clip eliminators.

All service is done through DPI only. Any questions, call our service department at 707.283.4374

INSTALLATION INSTRUCTIONS
FOR THE BLACK GOLD OR PLATINUM TRACK DIFFERENTIALS

STEP 1. Stand rear-end vertical on right wheel. Remove rear cover, remove quick change gears, using end of pinion, check and record lash.

STEP 2. Remove left bell, remove ring gear rubbing block and back adjusting stud out at least 2 turns. Remove spool and ring gear assembly and center section from right bell.

STEP 3. Remove "O" rings from both bells. Clean both bell flanges and each side of center section. Install complete shim package under right set up bearing. With the Platinum Track differential sitting in the right bell, tap with a dead blow or rubber hammer until the shim package is formed to the radius of the bearing inner shoulder, without the ring gear.

STEP 4. Install the center section. Install the unit with shims and right set up bearing. Install the left bell with no bolts.

STEP 5. Using three. 007 feeler gauges in a triangular pattern between left bell flange and center section, remove shims from right set up bearing until you have .007 clearance. Set aside the shims you have removed, they will not be used. Install ring gear to unit. Remove a .010 shim from under the right setup bearing.

STEP 6. Install unit back into the right bell with shims. Install the .010 shim that you removed from the right setup bearing, under the left setup bearing. Install the left bell, remember only the shim that gave the .007 clearance. Install all through bolts and torque to 35 ft lbs. Check the lash, if it is not correct, move the suitable shim from under right set up bearing and install under the left setup bearing. Re-torque after each shim change until you get the recorded lash.

STEP 7. Turn the ring gear 360 deg. To check for run out. When you have the proper lash and the bolts torqued you should have .007 preload on the bells.

STEP 8. Remove the Platinum Track Differential, keeping the shims in the proper side; install the carrier bearings in place of the setup bearings. Install the "O" rings in the bells with a slight amount of silicone.

STEP 9. Reassemble – don't forget the ring gear rubbing block, lube with grease on rubbing surface and stud to hold in place. All torqued, retighten rubbing block and stud until rubbing clock contact ring gear. Back off 90 deg. and tighten the jam nut.

Platinum Track Settings		Black Gold Settings	
1/4 Tight Unit	40-60 FT LBS	1/2 Tight Unit	90-110 FT LBS
1/2 Tight Unit (Standard)	80-100 FT LBS	3/4 Tight Unit	110-120 FT LBS
N/A	N/A	Full Tight	120-135 FT LBS

INSTALLATION INSTRUCTIONS
FOR THE BLACK GOLD DIFFERENTIAL
READ INSTRUCTIONS BEFORE INSTALLATION

How does it work? Simple, if either tire starts to slip the unit's automatic traction management system transfers torque to the tire with the traction until the tire slippage stops, making the car corner faster and smoother and requiring less stagger than a spool or locker, while eliminating the loose side effects of open style differentials.

Before running the Gold Track (Black Gold Differential), Please read the following information:

1. This unit is like any other high performance component. Use a good quality synthetic oil, such as redline heavy shockproof and always use a minimum of 4 quarts; this will extend the life and performance of these units. If you are running another type of gear oil other than Red Line Heavy Shockproof, we recommend adding a 6 oz. bottle of DPI LIQUID GOLD FORTIFIER.

2. When installing the unit it is important to check for proper axle engagement. Take white grease and apply it at the end of your axle. Push the axle into the rear-end housing until it is flush with the end of the drive plate. Remove the axle and measure the amount of grease removed by the splines in the gear; it should measure one inch to one and one-quarter inches of axle engagement.

3. On all Gold Tracks, if you are using floater axles, you must use a bolt to keep the axles from moving side to side. Make sure that the bolt and lock nut are clean and be sure to use loctite I.D. mark. On bolt head must be ground off and domed slightly.

4. Do not use any type of additives, such as slick 50, or any with Teflon or Molly's. This will damage the unit.

5. We suggest you build a set of checker tools to periodically verify the preload of your unit see Fig. 1 & 2, you can make these from a set of old axles. Use a standard type clicker torque wrench at the end of Tool #2. The range of brake away torque should be as follows:

   1/2 tight unit: 90 to 110 lbs.
   3/4 tight unit: 110 to 120 lbs.
   Full tight Unit: 125 to 135 lbs.
   CAUTION: break away torque should never exceed 140 lbs.

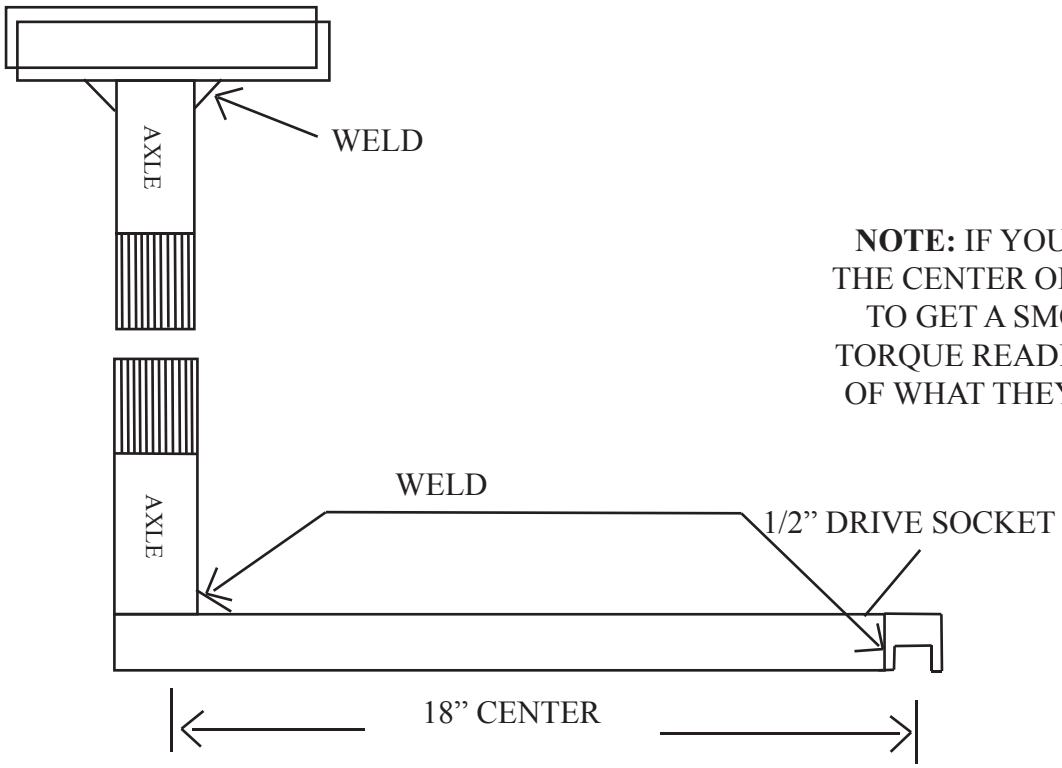
6. To extend the life of your unit, you should change the oil approximately every 250 laps. If the preload drops below 80 lbs. the unit should be sent in for service, or take it apart, inspect, clean, and readjust preload.

7. If you are running a preloaded unit and begin to experience a loose condition under entry, make sure to check the breakaway torque, this is an indication that the Platinum Track might be in need of service.
8. If you make tool #2 long enough you can check your unit in the car with one tire on the ground and out of gear.

9. This tool can also be made from an old wheel. Measure 18" from the center, weld ½" drive socket.

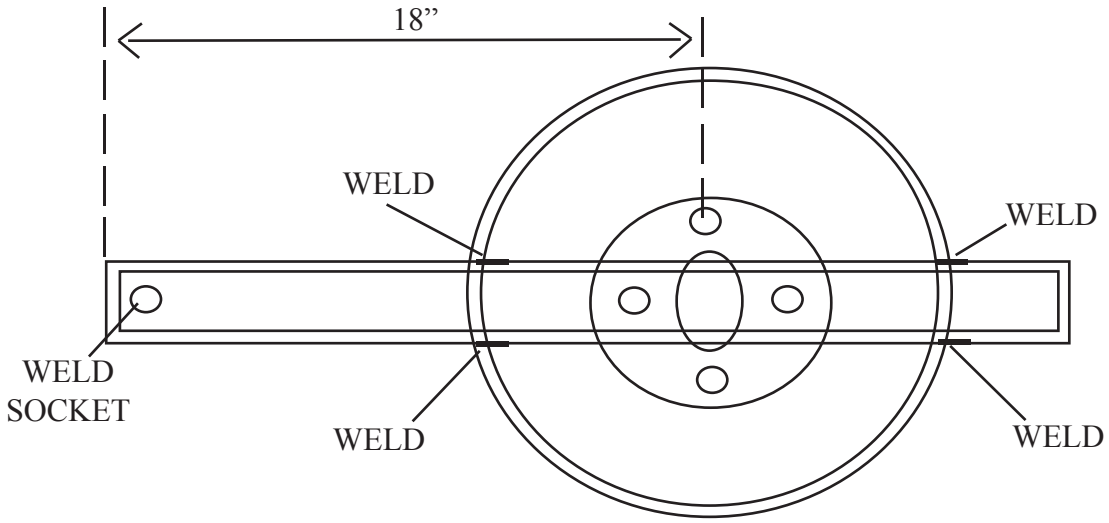
CHECKING TOOLS FOR MEASURING PRELOAD

TOOL #1 (CLAMP TOOL TO BENCH)



NOTE: IF YOU CHECK PRELOAD AT THE CENTER OF THE AXLE IT IS HARD TO GET A SMOOTH READING AND TORQUE READINGS WILL BE DOUBLE OF WHAT THEY ARE AT THE 18" END.

TOOL # 2 (CHECKING PRELOAD WITH UNIT INSIDE CAR)



*USE OLD WHEEL