RECOMMENDATIONS

Brake Caliper and Piston

Inspect the caliper piston and boot for rust, fluid leak or damage. If necessary, repair or replace the disc brake caliper assembly*.
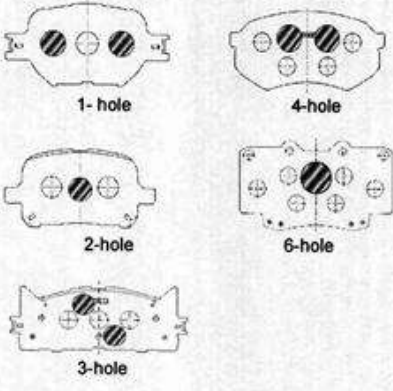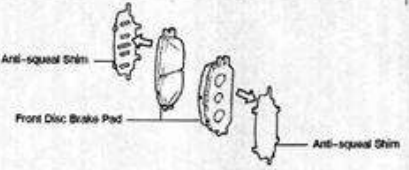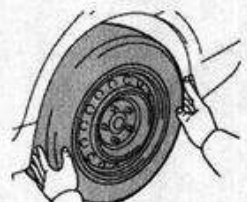
*Refer to Repair Manual for further instructions.

Lithium soap base glycol grease

- Abnormal brake pad and rotor wear can be caused if the caliper or caliper piston "sticks" and keeps the pad in constant contact with the rotor.
- Always lube piston and piston boot before installing brake pads.
- Apply a light layer of lithium soap base glycol (rubber) grease (P/N 08887-01206) to the piston and boot.

Front Disc Brake Pad Support Plates
*If equipped

Make sure the pad support plates have sufficient rebound, no deformation, no cracks or wear and that all rust and dirt are cleaned off.

PAD SUPPORT PLATES

- Remove, inspect, and clean pad clips to ensure a smooth open/close operation when the brake is applied, and replace if damaged.
- DO NOT apply any grease or lubricants to pad clips when re-installing.

Apply Grease to Pins and Clips
*If equipped

Apply a light layer of lithium soap base glycol (rubber) grease (P/N 08887-01206) to the sliding and sealing surfaces of the front disc brake cylinder slide pins and support bracket.

Lithium soap base glycol grease

- Do not use shim grease to lubricate caliper pins.
- Never apply grease or other surface treatments to the brake pad friction surface.

Brake Pad Shims

When replacing worn pads, the supplied MVP anti-squeal shims must be replaced with the MVP pads.

Apply 1-2mm thickness of the supplied MVP shim grease to the areas of the pad backing plate as indicated by the shaded areas based on plate configuration.

DO NOT apply shim grease to the entire area of the backing plate.

NOTE: The use of shim grease other than the shim grease supplied with the MVP brake pad kits may cause abnormal brake noise/squeal.

1-hole

4-hole

2-hole

6-hole

3-hole

- *For MVP Brake Pad Kits: Use the supplied shims and shim grease that comes with the MVP brake kit.
- Never apply grease or other surface treatments to the brake pad friction surface.
- Never use old or worn shims. They may have cracks or damage that is not clearly visible to the eye.
- Never apply anti-seize or other types of non-approved grease to the shims or caliper slide pins.

Install Front Brake Pads

Install the MVP brake pads with the supplied MVP anti-squeal shims to the disc brake cylinder mounting.

Anti-squeal Shim

Front Disc Brake Pad

Anti-squeal Shim

- When replacing the brake pads, the anti-squeal shims must be replaced together with the brake pads.
- Install the brake pads in correct position and direction.
- Never alter the friction material or pad shape.

Install Front Wheel

Check applicable vehicle repair manual for lug tightening and torque specifications.

- Do Not use an air impact wrench to tighten lugs.
- Use a torque wrench to install lug nuts
- Follow the proper lug torque tightening sequences (star pattern) when reinstalling wheel.
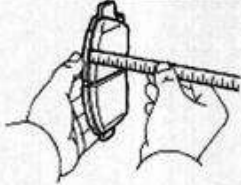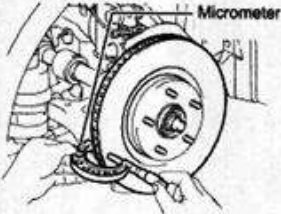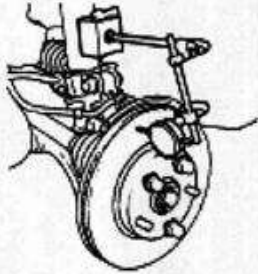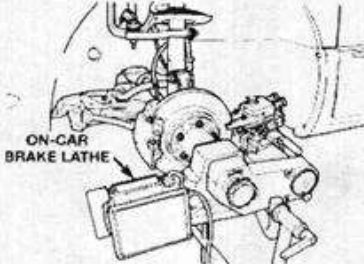
Installation Guide:

CONDITION

The following recommendations are intended to provide general tips for the inspection and/or installation of **Toyota's MVP** front brake pads and discs. <u>Always</u> refer to the model specific Repair Manual and E-TAS publications for specific repair instructions.

RECOMMENDATIONS

To ensure proper function and safe operation of the braking system, the following points should be followed when inspecting and installing Genuine Toyota MVP brake pads:

KEY INSPECTION POINTS	Description	Notes
Pad lining thickness Using a ruler or a pad thickness gauge to measure the pad lining thickness. If the pad lining thickness is less than the minimum, the brake pads should be replaced.		• Worn brake pads can cause noise and damage the rotor if not inspected and serviced regularly. • Refer to the model specific Repair Manual for standard and minimum thickness levels.
Disc Thickness Using a micrometer, measure the disc thickness. Refer to the vehicle model specific Repair Manual for Standard and Minimum thickness. If the disc thickness is less than the minimum, replace the front disc.	Micrometer	• Many customer complaints about disc brake operation are caused by rotor condition issues. • Variations can cause noise and vibration when braking. • Inspect rotor surface for any abnormalities and address/repair as necessary.
Rotor Run-out Using a dial indicator, measure the lateral run-out. Refer to the vehicle model specific Repair Manual for Maximum disc run-out. * Excessive run out can cause brake pedal pulsation		• If run-out is excessive, remove the rotor, turn it to the next lug, and repeat the procedure until the minimum amount of run-out is achieved. • If the run-out still exceeds the maximum, check the bearing play and the axle hub run-out. If the bearing play and hub run-out are normal and disc thickness is within the specified range, use an on-vehicle brake lathe.
Disc Brake Rotor Repair Toyota recommends using the on-car brake lathe for repairing rotor run-out and thickness variation. This method improves rotor and hub combined run-out, and is the preferred method when compared to rotor replacement and off-the-car rotor machining.	ON-CAR BRAKE LATHE	• If the disc thickness is less than the minimum, replace the disc. • Rinse rotor with brake cleaner after using the brake lathe to remove surface contaminants.

service marketing
bulletin

To: All Toyota Service Managers
        All Toyota Parts Managers

Subject: **NEW PRODUCT LAUNCH! – MVP Toyota Brake Pads**

Beginning early 2013, TCI will be offering MVP brake pads, available as an alternative to the OE brake pads:

- OE brake pads will remain available.
- The MVP brake pads are a Toyota approved alternative, at a lower cost to the customer.

Why is Toyota Canada launching MVP brake pads?

Toyota Canada will be increasing the price of the OE brake pads. In order to remain as competitive as possible, Toyota developed MVP brake pads, which will be priced lower than the current OE pads.

The following pages of this bulletin contain information on the installation of the MVP pads and the full fitment guide. Fitment guide will also be available in Infostream, under Service, Parts Ordering Guide (0145).

Please forward any queries you may have, to the servicemarketing@toyota.ca mail box and we will be happy to assist.

Sincerely,

Harry Thompson
Manager, Service Marketing and Promotion

TOYOTA