

B1 INSTALLATION DRAWING

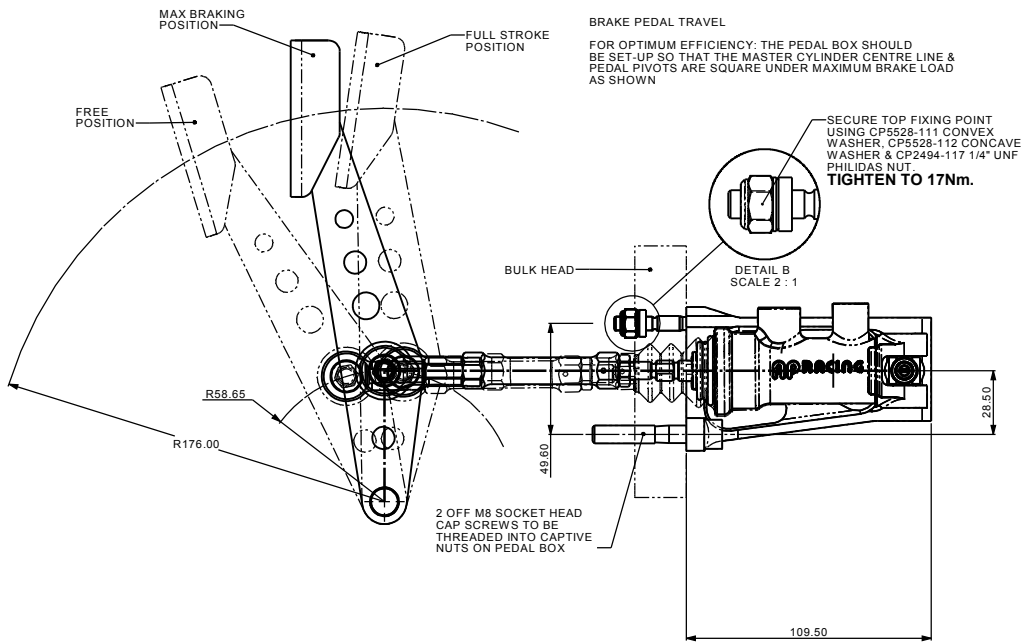
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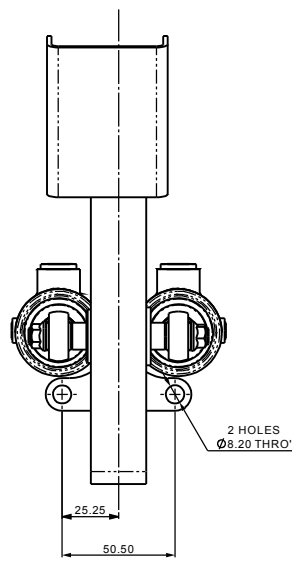


GENERAL DESCRIPTION:
BALANCE BAR UPGRADE KIT FOR DALLARA F3 CHASSIS. KIT USES AP RACING PUSH TYPE MASTER CYLINDERS. THE KIT DOES NOT INCLUDE A BRAKE PEDAL. THE STANDARD DALLARA BRAKE PEDAL IS USED BUT REQUIRES MODIFICATION, SEE INSTRUCTIONS BELOW.

PART NUMBERS:
BALANCE BAR KIT (EXCLUDING BRAKE PEDAL & MASTER CYLINDERS) - CP5528-1

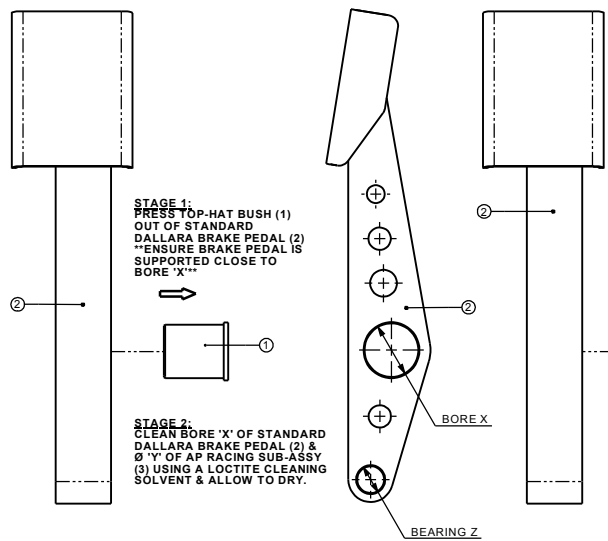
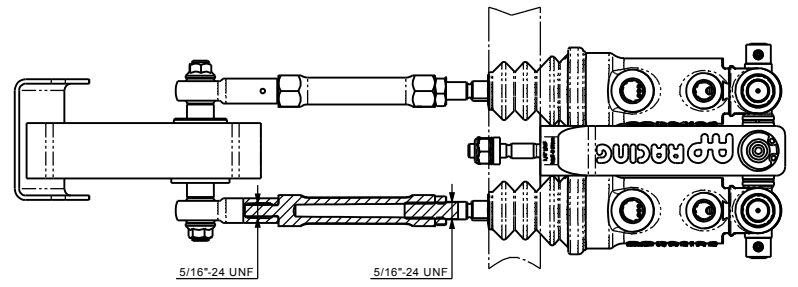
MASTER CYLINDER PART NUMBERS AS PER TABLE BELOW. REFER TO MASTER CYLINDER INSTALLATION DRAWINGS CP5854-1CD & CP7854-1CD FOR MORE INFORMATION.

PART No.	BORE SIZE	STROKE	DIAM A'	REPAIR KIT
CP7854-88R1E	14.0mm (0.55")	30.00	22.92	CP17855-88HK
CP7854-90PRT	15.0mm (0.59")	30.00	22.92	CP7855-80HK
CP7854-90H1E	15.8mm (0.62")	30.00	22.92	CP7855-90HK
CP5854-905PRT	16.8mm (0.66")	30.00	22.92	CP5854-905RK
CP5854-91PRT	17.8mm (0.70")	30.00	22.92	CP5854-91RK
CP7854-92PRT	19.1mm (3/4")	30.00	22.92	CP7854-92RK



RECOMMENDED REMOTE RESERVOIR - CP4709-19
VOLUME - 75cc

INSTRUCTIONS FOR DALLARA BRAKE PEDAL MODIFICATION



STAGE 1: PRESS TOP-HAT BUSH (1) OUT OF STANDARD DALLARA BRAKE PEDAL (2) **ENSURE BRAKE PEDAL IS SUPPORTED CLOSE TO BORE 'X'***

STAGE 2: CLEAN BORE 'X' OF STANDARD DALLARA SUB-ASSY (3) & Ø 'Y' OF AP RACING SUB-ASSY (3) USING A LOCTITE CLEANING SOLVENT & ALLOW TO DRY.

STAGE 3: SPRAY BORE 'X' OF STANDARD DALLARA BRAKE PEDAL (2) & Ø 'Y' OF AP RACING SUB-ASSY (3) WITH LOCTITE ACTIVATOR 7471 OR 7649 & ALLOW TO DRY. ** CARE MUST BE TAKEN NOT TO SPRAY THE PIVOT BEARINGS 'Z' IN THE PEDAL**

STAGE 4: APPLY LOCTITE 648 RETAINING COMPOUND AROUND THE LEADING EDGE OF THE AP RACING SUB-ASSY (3) & IN BORE 'X' OF THE STANDARD DALLARA BRAKE PEDAL (2). FIT AP RACING SUB-ASSY (3) INTO STANDARD DALLARA BRAKE PEDAL (2) USING ROTATING MOTION TO ENSURE GOOD COVERAGE OF ADHESIVE. ALLOW TO 24 HOURS TO CURE PRIOR TO USE.

****THE CUSTOMER IS RESPONSIBLE FOR ENSURING THAT THE AP RACING TOP-HAT SUB ASSY IS SECURELY BONDED****

SETTING UP THE BALANCE BAR:
ADJUST THE PUSHRODS SO THAT THE BALANCE BAR IS PERPENDICULAR TO THE PUSHRODS UNDER MAXIMUM LOAD. THE SYSTEM IS THEN SQUARE. IT IS NOT IMPORTANT THAT THE SYSTEM IS SQUARE WHEN RELEASED, BUT IT HAS TO BE UNDER LOAD.

FOR MAXIMUM EFFICIENCY, IT IS RECOMMENDED THAT THE PEDAL IS AT RIGHT ANGLE WITH THE PUSHRODS UNDER MAXIMUM BRAKING LOAD; AND ALSO KEEPING THE BALANCE BAR CENTRAL WITH BETTER SELECTION OF MASTER CYLINDER SIZES HELPS REDUCE INEFFICIENCIES. ALSO MAKE SURE THAT THE MASTER-CYLINDER PISTONS FULLY RETURN BEFORE USE. THIS CAN BE CHECKED BY FEELING THE PUSHRODS FOR SLIGHT MOVEMENTS. THERE SHOULD NOT BE ANY EXCESSIVE LOOSE MOVEMENT.

WHEN THE BALANCE BAR IS ADJUSTED THE MASTER CYLINDERS WILL ARTICULATE DURING THE BRAKING EVENT. IT IS IMPORTANT THAT THE HYDRAULIC LINES DO NOT RESTRICT MASTER CYLINDER MOVEMENT IN ANY WAY. ANY RESTRICTION ON MASTER CYLINDER MOVEMENT MAY RESULT IN A REDUCTION IN EFFICIENCY.

MAX ANGLE ADJUSTMENT AT SETUP. THIS IS SET BY ADJUSTING THE THREAD ENGAGEMENT OF THE ROD END EXTENSION AND MASTER CYLINDER PISTON.

THIS RELATES TO 8.0mm OF DIFFERENCE IN TRAVEL OF FRONT TO REAR CYLINDERS. REMEMBER THE BALANCE BAR SHOULD BE PERPENDICULAR WHEN AT MAX BRAKE PRESSURE.

Issue	Date & No.	Alterations	Zone	Initials
1	28/01/09 B5398	FIRST ISSUE		JH
2	03/03/09 B5398	ADDITIONAL NOTES ADDED TO PEDAL MODIFICATION DETAILS		JH
3	06/03/09 B5398	STUD MOUNTING DETAILS ADDED. NOTE TO SPECIFY EXTENSION PIECES NOT SUPPLIED ADDED		JH
4	16/04/09 B5398	CP5828-111 CONCAVE-CONVEX WASHER WAS CP2495-1305 STD WASHER. CP4709-19 RESERVOIR ADDED		JH

SCALE 1:1	SHEET 1 OF 1
DRAWN /heritage	
APPROVED	
DERIVED FROM	
TITLE	BALANCE BAR KIT
DRG NO.	CP5528-1CD