

# INSTALLATION - SERVICE INSTRUCTIONS

765 South Pierce Avenue Louisville, Colorado 80127

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**Aluminum 9" Ford Cases**

October '03

## PART NUMBERS:

	DESCRIPTION
57430.....	Thru-Bolt aluminum 9" Ford Case (3.062 bores).
57440.....	Thru-Bolt aluminum 9" Ford Case (3.250 bores).
57448.....	Thru-Bolt aluminum 9" Ford Case (3.812 bores).
57448-95.....	Thru-Bolt aluminum 9" Ford Case (3.812 bores). (clearanced for 9 1/2" ring gear)
57448-95S.....	Thru-Bolt aluminum 9" Ford Case (3.812 bores). (clearanced for 9 1/2" ring gear w/steel caps)

## PARTS INCLUDED:

1 - 57430.....	Aluminum case w/57445 billet aluminum caps.
2 - 57500-1.....	3.062" steel bearing adjuster (57430).
1 - 57440.....	Aluminum case w/57445 billet aluminum caps.
2 - 57550-1.....	3.250" steel bearing adjuster (57440).
1 - 57448.....	Aluminum case w/57446 billet aluminum caps.
2 - 57560-1.....	3.812" steel bearing adjuster (57448, 57448-95 and 57448-95S) w/10-32 allen screws.
1 - 5740X.....	Pinion support stud kit (see variables below).
1 - 57906.....	Adjuster lock kit (57430 & 57440).

## VARIABLE PARTS:

57407.....	Pinion support stud kit (7/16-20 & 7/16-14 threads). Stud kit includes 5 - 57406 studs, 5 - APN12-1 12 point nuts, 5 - AN122585 hardened washers and 1 - 5000-181 pilot bearing retainer snap ring.
57408.....	Pinion support stud kit (3/8-24 & 7/16-14 threads). Stud kit includes 5 - 57405 studs, 5 - AJN12-1 12 point nuts, 5 - AN122584 hardened washers and 1 - 5000-181 pilot bearing retainer snap ring.

## PRIMARY APPLICATIONS:

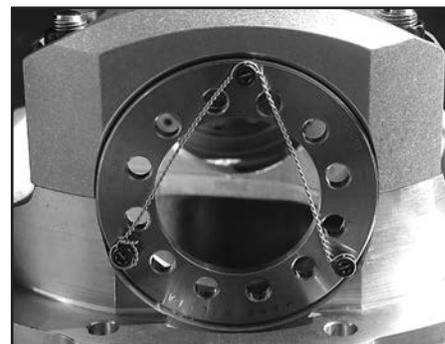
Drag racing, Oval track, Street and Off road. 57430 cases will accommodate carriers or spools with a 1.78" diameter bearing journal. 57440 cases will accommodate carriers or spools with a 2.00" diameter bearing journal. 57448, 57448-95 and 57448-95S cases will accommodate spools with a 2.25" bearing journal.

## ASSEMBLY OVERVIEW:

- 1) Install pinion support studs using #271 Loctite. 57405 studs must be installed so that the shoulder on the stud is flush or slightly below the surface of the case. Screw 57406 studs in until they bottom out.
- 2) When using standard pilot bearing (57907), press in until seated then install 5000-181 snap ring retainer. Make sure snap ring is fully seated in the groove in the case. If using heavy duty long pilot bearing (57914), press in until seated then install the 2 button head bolts supplied with the bearing.
- 3) Do not grind on the case in the pilot bearing area for ring gear clearance. Newer gear sets have the top inner corner of the teeth chamfered for this purpose. If an older gear is being used grind ring gear teeth rather than case for needed clearance.
- 4) During final assembly, after setting pinion depth and backlash, torque pinion support nuts and main cap bolts (see below).
- 5) On 57430 and 57440 cases, bend adjuster lock tabs to line up with one of the holes in the side adjuster. Install locks with button head allen bolt and lock washers. On 57448, 57448-95 and 57448-95S cases the adjusters are retained by a set screw with a nylon button under it. **Never** tighten set screw without nylon insert in place, adjuster threads will be damaged.

**Note:** 57448, 57448-95 and 57448-95S cases manufactured after 9-03 also have adjusters with 3 allen screws (drilled for safety wire) that pinch the adjuster threads to lock the adjusters in the case. After backlash is set and the caps are torqued, tighten the 3 allen screws (40 in/lbs) and safety wire the heads (see photo at right). The allen screws should always be loosened before disassembly and never be tightened with the adjuster out of the case, this will deform the threads on the adjuster and it will not screw into the case. Also never attempt to move the adjuster in the case without first loosening the allen screws, this will damage the threads in the case. Also, depending on the position of the allen screws, a small notch may be required on the gasket flange of the housing to allow the screw head to clear.

- 6) Make sure side fill plug is tightened.



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## **TORQUE SPECS:**

Main Cap bolts (1/2-20) 70-75 ft/lbs.

Pinion support studs (7/16-20) 40-45 ft/lbs.

Pinion support studs (3/8-24) 30-35 ft/lbs.

## **MAINTENANCE REQUIREMENTS:**

Periodic visual inspection of case and it's components. Carefully inspect area around pilot bearing. Check torque on all fasteners. If pinion support studs need to be removed, apply heat to soften Loctite.

## **ALUMINUM CASE NOTE:**

When installing thirdmember assembly check clearance at the points shown in the diagram. Larger caps and/or the adjuster lock bolts on aluminum cases can possibly come in contact with the back of some stock Ford housings. If the thirdmember tightens up or won't turn at all after installing it, the caps are hitting the housing. Modify the housing at the point of interference by heating and tapping the area back. Do not grind on caps! 9 1/2" ring gears may also be close to the inside of a stock housing.

