SUSPENSIONS
Suspension Operation

The primary function of the rear suspension is to provide a comfortable ride in all type of riding conditions. The rear suspension has many adjustable features for fine tuning to achieve optimum comfort.

The secondary function is to provide superb handling and stability, such as adjustments to vary ski pressure for steering and controlling the snowmobile's center of gravity.

Refer to the suspension type identification chart on page 9.9 to identify your suspension type. For example, 1992 Indy 440 - Type XX. Adjustment procedures for each type are explained on the following pages.

TYPE	TOLERANCE
Extruded Aluminum Types XI, XII, XIV, XXII ITS Types I & II, Type XX 121", XC-100	3/8" - 1/2" (1 - 1.3 cm) between track clip and hi-fax with 10 lb. (4.5 kg) weight. See page 9.10.
Extruded Aluminum Types XVI, XXI	1 1/4" - 1 1/2" (3.2 - 3.8 cm) between track clip and hi-fax with 10 lb. (4.5 kg) weight. See page 9.10.
Extruded Aluminum Types IX, XIII, XV, XVII, XVIII, XIX, XXIII Type XX 133"	3/4" - 1" (2 - 2.5 cm) free hanging between track clip and hi-fax; measured at rear of front hi-fax with 10 lb. (4.5 kg) weight. See page 9.10.
Xtra	Elevate machine enough to assure track doesn't contact ground. 1/2" clearance, measure free hanging. See page 9.10.

Suspension Identifications

Extruded Aluminum Type IX ..... 1986 Long Track Models

Extruded Aluminum Type XI ..... 1985 Indy Models

Extruded Aluminum Type XII ..... 1985 SS

Extruded Aluminum Type XIII ..... 1986 - 1990 Star, Sprint (ES), StarLite, Indy Lite

Extruded Aluminum Type XIV ..... 1986 SS

Extruded Aluminum Type XV ..... 1986 - 1992 Indy Models Except 133" SKS;
1993 - Current Standard Lite Models

Extruded Aluminum Type XVI ..... 1987 - 1990 StarTrak; 1993-Current Indy Lite GT,
StarLite GT

Extruded Aluminum Type XVII ..... 1987 - 1990 LongTrak RLR

Extruded Aluminum Type XVIII ..... 1990 - 1992 SuperTrak

Extruded Aluminum Type XIX ..... 1990 - 1992 WideTrak

Extruded Aluminum Type XX ..... 1990 - 1992 Indy Models

Extruded Aluminum Type XXI ..... 1990 - 1992 141" Models; 1994 WideTrak GT

Extruded Aluminum Type XXII ..... 1990 - 1993 XC & XCR

ITS Type I ..... 1993 Standard 121" Indy Models;
1994 Trail, 440, Classic, 500 EFI

ITS Type II ..... 1993 Trail Deluxe and all SKS Models;
1994 Trail Deluxe, Sport SKS, 440 SKS,
Classic Touring, 500 EFI SKS, RXL Touring

XC-100 ..... 1994 Super Sport, XCR, XLT, XLT SKS,
XLT Special, Storm, Storm SKS, RXL

XC-101 ..... 1994 - Current 440 XCR SP, 600 XCR

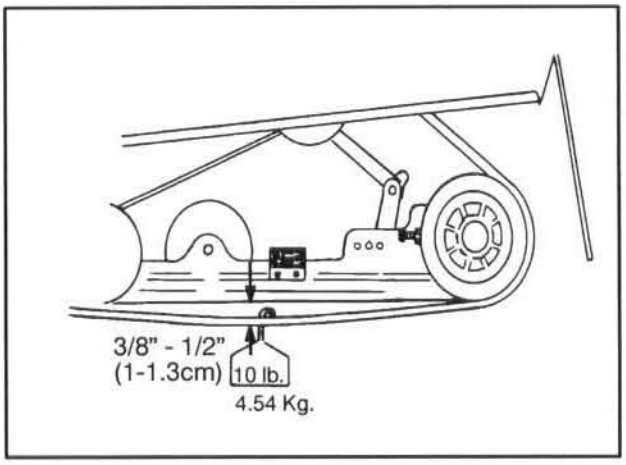
Extruded Aluminum Type XXIII ..... 1993 - Current WideTrak LX, Military WideTrak

XTRA-12 ..... 1994 XLT Special XTRA; 1995 XLT SP, RXL

Track Tension

Tension adjustments should be made only after the track is warmed up and limber. Refer to track tension specifications on page 9.9.

1. Turn the machine off.
2. Lift the rear of the machine and safely support it off the ground.
3. Proper track tension is obtained by placing a 10 lb. (4.54 kg) downward pressure on the track at a point approximately 16" (40.6 cm) ahead from the center of the rear idler wheel.



Always align the track after tensioning the track. See page 9.11.

Track Tension - XTRA Suspension

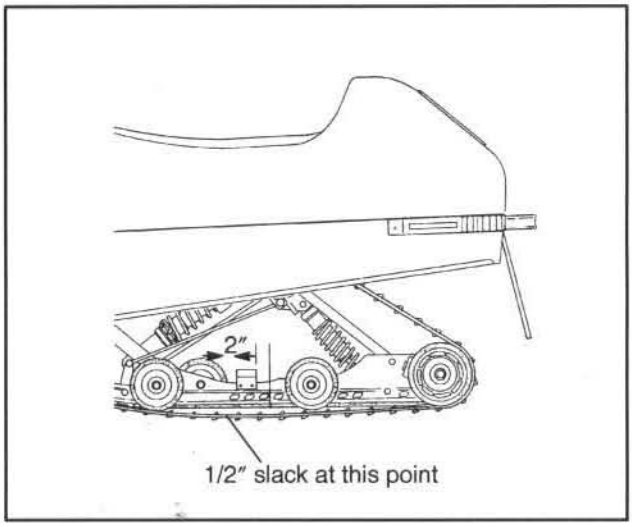
CAUTION: This dimension is critical for prevention of derailing, drive shaft ratcheting and excessive hi-fax wear.

Tension adjustments should be made only after the track is warmed up and limber.

1. Turn the machine off.
2. Lift the rear of the machine and safely support it off the ground.
3. Check track tension 2″ (5.1 cm) forward of the rail jounce bumper.

Properly adjusted, slack in track should be 1/2″ (1.3 cm) at the point described in step 3, free hanging.

4. Loosen rear idler shaft bolt.
5. Loosen locknuts.
6. Tighten or loosen track adjusting screws as necessary to provide equal adjustment on both side of the track.
7. Rotate track 1/3 of its travel and measure again.



Tension should be checked frequently on new units and in marginal snow or hard packed snow conditions.

Always align the track after tensioning the track. See page 9.11.